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SANITARY METHODS FOR SUPPLYING VESSELS WITH WATER FOR DRINKING AND CULINARY PURPOSES WHEN OBTAINED FROM SOURCES ASHORE.

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The following regulations, concerning water provided for drinking and culinary purposes on vessels, were approved by the Secretary of the Treasury and promulgated in Department Circular No. 234 of March 3, 1921:

On and after April 15, 1921, any person, firm, or corporation operating vessels in interstate traffic or between foreign ports on or near the frontiers of the United States and adjacent ports in the United States will be required to furnish on such vessels water for drinking or culinary purposes under one of the following conditions:

(a) If water for drinking or culinary purposes is not obtained ashore, it must be treated by an approved method.

(b) If water for drinking or culinary purposes is obtained ashore, it must be from an approved source or treated by an approved method.

On and after April 15, 1921, the piping system on all vessels must be so arranged that no connection can be made between the drinking-water system and any other water system aboard.

On and after April 15, 1921, an approved sign, stating that the water is unfit to drink, must be properly placed at every tap or other outlet from which water of an unsatisfactory sanitary quality and safety may be obtained.

Since these regulations affect vessels operating in coastwise as well as in inland river and lake traffic, it is obvious that widely different conditions for supplying drinking water must be dealt with. Coastwise vessels must of necessity, on account of the salt in sea water. if for no other reason, obtain water from sources of supply ashore or distill sea water aboard. On the other hand, vessels plying on rivers and most of the inland lakes of this country have available "overboard" fresh water of varying degrees of safety and desirability for drinking purposes, ranging from the clear, sparkling, cold, and practically sterile water of certain areas of the Great Lakes to the relatively warm, muddy, and sewage-laden waters of the Ohio and Mississippi Rivers below some of the large cities of the Central West. In the past, water obtained directly from these sources and provided to passengers and crews for drinking purposes has been responsible for several typhoid fever outbreaks. Under the Federal regulations quoted in the beginning of this report, such practices are now unlawful.

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To a shipping company, the selection of either or both of these two methods outlined in Treasury Department Circular No. 234 for providing drinking water on its vessels depends largely on the expense involved. This, in turn, is dependent on the waters in which the ships navigate, the type of vessels, and the service in which they are operated. Large storage tanks on a vessel may take up valuable space. The weight of the water carried in them must be given serious consideration. A water-treatment apparatus aboard, although eliminating the necessity for carrying large quantities of water and the inconveniences connected with obtaining drinking water from sources ashore, is an addition to the equipment not necessary for the navigation of the ship and is an apparatus which

requires the careful attention of the engine-room crew.

The practicability of obtaining water for drinking and culinary purposes from certified sources ashore, for a bulk freighter operating on the Great Lakes and docking at piers and wharves along various canals and slips in the rivers or harbor at terminal ports, would be questionable, owing to the uncertainty of knowing in advance whether such water would be conveniently available at the piers at which the vessel would load or unload cargoes during a season. On the other hand, in Ohio and Mississippi River shipping, the city water at the larger ports of call is usually of very satisfactory sanitary quality and could be made conveniently available at the steamboat landing or wharf boat. In such cases, to obtain the drinking water for a large passenger vessel from these turbid and sewageladen rivers and efficiently to treat same aboard would require careful operation of the treatment apparatus by trained men-a condition not likely to be provided for. Generally, it can be made convenient for all passenger vessels to obtain drinking water from certified sources ashore, because at the large terminal ports a safe water supply is usually available. Since the vessel docks at the same wharf or pier each trip, hydrants can be placed to facilitate prompt filling of the ship's water-storage tanks. However, for vessels not calling regularly at ports where drinking water of satisfactory sanitary quality or safety is available, some sort of treatment apparatus, such as a distiller, should be installed.

In order that all water provided on vessels for ablutionary purposes may be of the same sanitary quality and safety as that provided for drinking and culinary purposes, it may be more desirable and economical, on account of the great quantities of water required and the necessity for limiting the number of large water-storage tanks, to treat aboard water taken on en route than to carry aboard in tanks water obtained from sources ashore. This is particularly true in the case of vessels operating on the Great Lakes, for the physical quality of this water is such that it can be readily treated.

The majority of the companies owning the larger passenger vessels operating daily between terminal cities on these lakes (at which the public water supply is not only highly satisfactory but conveniently available at the piers) have elected to comply with the Federal regulations by disinfecting aboard all water used for the above purposes on their ships, obtaining the water to be thus treated either from sources ashore or directly overboard, or both. For smaller passenger boats, especially those operating on regular schedules and stopping at one or more large ports each day, it is usually more convenient and economical for the operating companies to make provisions for obtaining the ship's drinking water from certified sources ashore and for storing same aboard in tanks. This paper deals largely with supplying these vessels with water from sources ashore.

There are two satisfactory systems by which water may be distributed aboard a vessel-the "gravity system" and the "pressure system." Under the former system the storage tank or tanks are located upon the upper decks of the vessel, so that water may flow by gravity to all parts of the ship where it is desired. For supplying water to cabins on the upper decks it may be desirable to locate a small tank on top of the "Texas" or wheel house (see Fig. 1). are some objections to locating water-storage tanks on the upper deck of vessels, which must be taken into consideration when a decision is made relative to the adoption of a water-distributing system for a ship. In winter the water in these tanks may freeze unless protected. On Great Lakes freighters a steam pipe is passed through the water-storage tanks, and by circulating steam through the pipe during cold weather, freezing of the water is prevented. Heavy loads of water on the upper decks may be undesirable on vessels of shallow draft or of light construction. In such cases the distribution of the load by means of a number of small tanks may be helpful.

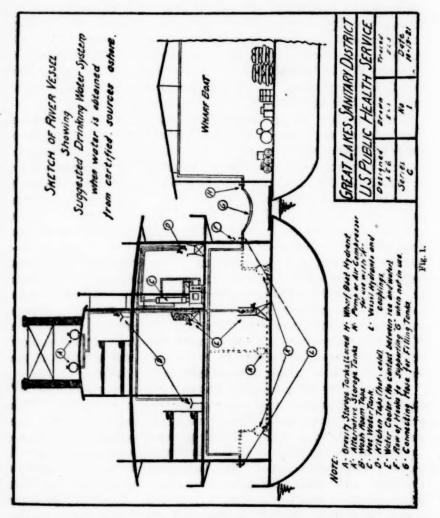
As implied by its name, distribution by the "pressure system" consists of delivering the water under dynamic pressure. This pressure may be attained by direct pumping or by air pressure on the water in the storage tank. The air-pressure system possesses the value of furnishing pressure in the distributing system for a limited period of time upon occasions when there would be no steam pressure available in the boilers for the operation of direct pumps, as when boilers on river vessels are being washed out. Under the pressure system the storage tank may be located at any desirable place on the

ship, preferably convenient to the engine room.

Water-storage tanks are frequently located in the hold of a vessel and there can be no objection to such a location, provided the tanks are clear from all bilge water and are provided with water-tight covers, which are kept locked. Tanks located in the hold are frequently inconvenient of access and consequently liable to neglect. For this

reason it is highly desirable that tanks used for storing drinking and cooking water be located on deck. For their protection against damage by freight they should be inclosed.

Under no circumstances should drinking-water storage tanks be formed in part by the hull of the ship, because of the danger of contaminating the water stored therein in case a seam in the section



of the hull forming part of this tank should be opened as a result of an accident. Forward and aft "peak" tanks have been and still are being used for storage of drinking water, but it is advisable that the use of such tanks for this purpose be prohibited. Down pipes from toilets or any other sewer lines or drains should not pass through the drinking-water tanks on a vessel.

Drinking-water storage tanks should always be identified as such by a sign, especially when similar tanks for other water are located on the vessel. It is also desirable that the covers to all tanks used for storage of water for drinking or culinary purposes should fit tightly and be kept locked at all times when not necessary to open same. The keys should be intrusted to the charge of the ship's officer responsible for the drinking-water supply.

In either the "gravity" or "pressure" installations a distributing system physically separate from all other piping systems aboard should be installed for delivering the drinking water throughout the vessel to places where it may be conveniently available, such as the galley quarters, public saloons, parlors, vestibules, all decks, engine room, fire hold, and, when so desired, the staterooms. Of course, if the running water in public lavatories and staterooms is supplied from the drinking-water tanks, the distributing system for this water may be the same as the drinking-water system. All the taps and hydrants aboard which are conveniently located so that they can be drawn upon for drinking and culinary purposes and which deliver water that is not of the regular certified drinking and culinary supply should be posted with appropriate signs stating that the water is unfit to drink.

The hot water used in the galley quarters and the chilled water at the drinking water coolers should be supplied through branch feed lines having no returns to the main distributing system; but it is usually advisable to have all other branch lines connected back to the main line. Coils of pipe forming a gridiron in the ship's refrigerator or passing through the ice box of a cooler are more satisfactory than the separate ice and water compartments in drinking water coolers. By such an installation former water storage barrels can be converted into water coolers at little expense (see Fig. 1).

It is necessary that the drinking water supplied to roustabouts and members of the crew be of the same sanitary quality as that provided for the public. In fact, from a public health standpoint, it may be even more important that these persons should be protected; for, on account of their ignorance, if they should become "typhoid carriers" they would be a relatively greater menace to the public health. "Old timers" who tell of having drunk "the good old river or lake water" all their lives without experiencing a day's sickness, and superstitious Negroes, who believe that a lump of coal in the bottom of a barrel will "remove all sickness from river water," should be reasoned with if possible and their stories discredited by the truth.

The present practice on Ohio and Mississippi River vessels of storing water in barrels, tanks, or other containers and drawing the water in smaller receptacles from these containers as needed, is very March 17, 1922. 618

unsatisfactory and, where water to be used for drinking and culinary purposes is concerned, potentially dangerous, on account of the opportunities for contamination of the water through excessive handling. This "carry" system is very common on packet freight and passenger vessels operating on the Ohio and Mississippi Rivers.

Investigations of Ohio River Vessels.

During the summer of 1921 a special study was made of the sanitary quality of the water supplied for drinking and culinary purposes on passenger vessels operating on the Ohio River, especially out of Cincinnati.

Practically all of these vessels were supplied with drinking water from certified sources, such as the public supplies of Louisville, Ky., Cincinnati, Ohio, Evansville, Ind., Huntington, W. Va., and Pittsburgh, Pa. Water from these sources was delivered to the boats in many strange and different ways. On account of the fact that hydrants are not available at the landings in most of these cities, it was often necessary for the shipping companies to contract with some local truckman to deliver water to the landing in barrels. The contractor usually obtained this water from the nearest hydrant available above the public landing, and delivered it to the wharf boat in ordinary wooden kegs or barrels. In other cases, roustabouts were provided with wheelbarrows and sent to obtain water in kegs or barrels from the nearest hydrant available, or if wheelbarrows were not provided, the kegs or barrels were carried or rolled down the incline of the landing. The carrying of water in ordinary wooden buckets or galvanized-iron pails from the nearest hydrant to the storage tank or cooler aboard the vessel was another common prac-The cost of transporting water by these makeshift methods more than represents the interest charges upon a sum of money which would provide a satisfactory water-supply system upon the landing. As is usually the case in most shipping problems, the most satisfactory solution is the cheapest.

For general cooking, washing, and fire purposes, the water used aboard these vessels was invariably river water. Usually the hot water in the kitchen and pantry came direct from the boilers; whereas in some cases condensed steam was collected and used as far as possible, this supply being supplemented by the hot water from the boilers. Not infrequently the same container used for carrying river water from storage barrels to dry sinks in the staterooms for toilet purposes would be used for delivering drinking water from storage tanks to coolers and other smaller containers aboard the vessel. Sterilization of kegs, barrels, tanks, and pails in which drinking water was stored or transported was rarely done, the nearest attempt to it being a

rinsing of the container. To one familiar with the insanitary conditions which exist, on the lower deck especially, of river packet vessels, the need of further description to point out the potential dangers connected with the supplying of drinking water to these vessels is quite unnecessary.

The following table, giving data relative to the results of bacteriological analyses of samples of drinking water from packet freight and passenger vessels operating on the Ohio River out of Cincinnati, gives a good idea of the sanitary quality of the drinking water which was served to the crews and the traveling public on these vessels during the summer of 1921.

ABLE I.

[Samples were collected and analyzed by the Cincinnati Board of Health.]

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B. coli determinations.	Negative.	. e.	-	0004400T0444 000044T000004F0
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• Fleet A: Drinking water drawn from general storage tank to 5-gallon glass demijohns. Ice and water not in contact in cooler. Fleet B: Drinking water purchased in 5-gallon is 2-gallon glass demijohns. Ice and water not in contact in cooler. Fleet C: Drinking water drawn from general storage tank in palls for filling metal cooler. Ice and water in contact. Fleet D: Drinking water cooler filled from storage barrels direct. Ice and water not in contact.

It will be noted that in practically all cases the bacteria counts on agar plates incubated at 37° C. are far in excess of the Treasury Department standard of 100 per cubic centimeter. The bacteria counts were frequently as high in samples which gave negative results in presumptive tests for the B. coli group as in those which gave positive results. Since the public and private supplies from which these vessels obtained their water were all certified as producing a water of satisfactory sanitary quality, one would not expect such * high bacteria counts if the water was properly protected from the time it was drawn from the hydrants ashore until it was delivered to the crew or traveling public aboard, from the taps in the galley quarters or at the drinking-water coolers. As described above, excessive handling of this water under conditions existing in the steamboat traffic certainly exposes it to many potential sources of contamination, and, therefore, in order to protect the water obtained ashore for drinking and culinary purposes, it is imperative that a more direct and satisfactory method for delivering this water to and storing and distributing the same aboard vessels should be adopted. In the following paragraphs suggested methods for different classes of passenger vessels are described.

Inland River Vessels.

These vessels are of three classes: (1) Regular packet, freight, and passenger vessels operating on regular schedules between terminal river ports; (2) local excursion steamers operating out of a single port; and (3) miscellaneous craft, such as tows, barges, dredges, sand suckers, and others. Vessels of each of these classes stop at same landing or wharf boats each trip, and therefore arrangements could be made to locate hydrants for conveniently obtaining drinking water ashore. An exception to this statement would be vessels which frequently operate on rivers along which no cities are located for great distances, or vessels which remain away from port for weeks at a time. On such vessels, there should be installed a distiller of sufficient capacity to supply all water used for drinking and culinary purposes.

At one of the large Ohio River cities a line was extended from the city main to the public landing at the expense of one of the shipping companies. There has been some discussion among city waterworks officials and the shipowners as to who should pay for such a line. As there is a distinct public health value to the community in having all vessels calling at its port provided with a safe drinkingwater supply, the municipality should at least be willing to make reasonable concessions in connection with the extension of such a pipe line. Indeed, the more progressive city, in accordance with

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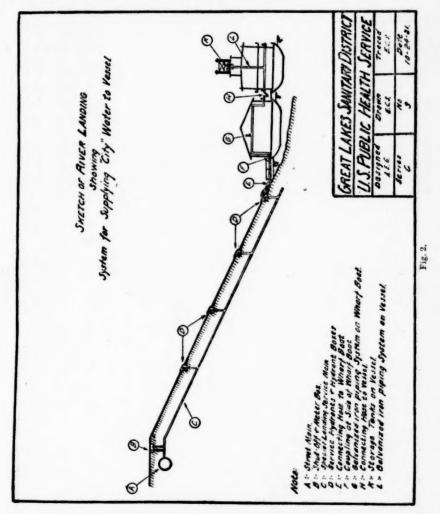
its public health policies, might make this extension free of charge.

There is one feature common to river shipping which is different from that of lake or coastwise navigation, namely, the variation in the river level. On lakes the water level is fairly constant, and wharves and piers are built as "permanent" structures at a predetermined distance above high-water line. In tide-water ports, an elevation above high or mean tide is usually set for structures. But at river ports, if water shipping is to be uninterrupted, arrangements must be made to meet conditions developing as a result of varying levels of the river. Accordingly, the details in connection with the supplying of drinking water to these vessels must be adjusted to meet these conditions.

Obviously, a hydrant located at low-water level on the public landing or incline would be submerged during times of high water. Therefore, at river ports several connections to the water main at different hydrants could be set each in a valve box with a heavy cover fitting flush with the floor of the incline and provided with a seep drain (see Fig. 2). The spacing of these hydrants up the incline will in general depend on local conditions. It is believed that there should be at least one of these connections for every 15 feet vertical rise of the incline. Spacing at wider intervals will mean that long lengths of hose must lay on the landing. This hose, besides being inconvenient to trucking, will be liable to injury from the same.

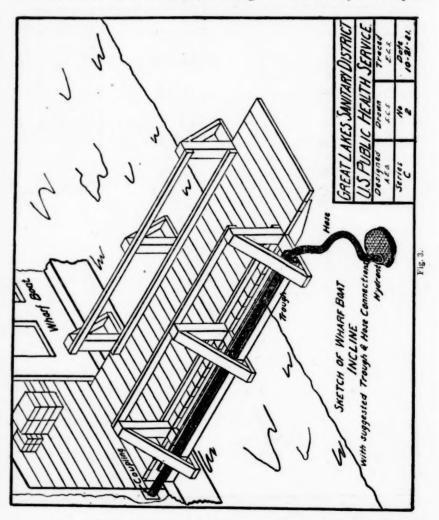
Corresponding to the permanent piers and docks at lake and coastwise harbors are the river wharf boats, which serve as both piers and freight sheds. As the river rises or lowers, the position of the wharf boat is changed accordingly, and as a result the booms. gangplanks, and electric lines must be adjusted to accommodate this movement. So, also, it would be necessary to adjust the hose connection from the landing hydrants to the wharf boat, either by varying its length or by making a new hydrant connection. Between the wharf boat and the bank of the incline there is always a water space of several yards, depending upon the slope. Where public sewers discharge into the river at or above the wharf boats, the water around this vessel will be grossly contaminated, and every precaution must be taken to prevent the hose from dropping into it. If the water hose is attached to the wharf-boat connection and allowed to sag of its own weight between this point and the landing, it is very probable that when adjustments are made to this hose at the wharf-boat end, it will be dropped into the water. The contamination of the city water supplied to the storage tanks aboard the vessel with but a small quantity of this sewage-laden river water might result in the infection of a great many persons drinking water aboard. It is therefore desirable that the hose section between the wharf boat and the landing be laid on or in a guideboard or pipe conduit, either of which may be conveniently attached to the frame structure supporting the guide rail on the gangplank (see Fig. 3).

On the wharf boat, from the land-side connection, a galvanizediron pipe system could be installed to deliver this water to the river



side of the boat. The pipe should be carried across the boat by attaching it to the lower chord of a roof truss. On the river side, as many connections can be made as are needed for the convenience of supplying water to the vessels docking alongside the wharf boat. Such a piping system on the wharf boat has a distinct value as a fire-protection measure.

It is very desirable that these connections be located as far above the floor of the wharf boat as will be convenient for making the hose attachment, in order to make as remote as possible the opportunities for contaminating the pipe ends. A valve at the river side of the wharf-boat piping should be provided, while one at the bank terminal would be convenient, although not necessary. For pur-



poses of identification and to warn against the stacking of freight in front of these water connections on the wharf boat, they should be properly posted. A sign with background in color of distinct contrast to the general color of the wharf-boat shed will very well serve this purpose. If pumps are installed on the wharf boats for pumping river water for fire purposes, or if any other hydrants for water other

than drinking water are located on the landing, all outlets and hydrants in these water systems should be identified and posted, warning against the use of this water for drinking purposes. The painting of drinking-water hydrants and outlets white and all others red is a simple way to distinguish between the two, the colors being symbolic of purity and danger, respectively.

Between the wharf-boat connection and the vessel a second section of hose will be necessary. Each vessel should carry its own drinking water supply hose, which should be used for no other purposes. It should be so stored away on the ship as to protect it from possible contamination. The shorter this section of hose is the better, and, therefore, it is highly desirable that delivery pipes to the storage tanks be installed on the vessel, with connections on both sides of the ship, to which the hose connecting with the wharf boat can be attached. The direct filling of storage tanks through a long hose inserted into the tanks is unsatisfactory, as careless handling of the hose or leaving the tank cover open may result in contamination of the drinking water.

Coastwise Vessels.

There are two methods by which water to be used for drinking and culinary purposes and obtained from certified sources ashore may be supplied to this class of ships:

(1) Through hose direct from hydrants on the wharves or piers at which the vessel docks, or

(2) Through hose direct from water boats, whose tanks are filled through hose from hydrants on wharves or piers.

(1) The location of hydrants on docks is a very important matter, and is one which should be given careful study. If it is desired to locate a hydrant under the floor of the wharf, in order to have no obstructions on the platforms, care should be taken to see that the end of this hydrant is protected against contamination which may result from filth dropping through the platform floor or being washed through during rains or flushing of the floors of the piers. A "gooseneck" curve on the pipe forming this hydrant is usually satisfactory in preventing filth from collecting in the end of the pipe. In order to prevent the dropping of the end of the hose into the polluted waters of the harbor, either through accident or carelessness, it is desirable to set all hydrants back at least 2 feet from the edge of the pier. It is obvious that the hydrants should be self-draining and the supply pipes protected against freezing in winter.

Drinking-water hydrants should be so marked as to be readily distinguished from all other hydrants on a pier, as outlined under

the section on river vessels.

The size and length of water hose will, of course, depend upon local conditions; but every effort should be made to reduce the length of hose in the interests of economy and convenience. To prevent injury to hose having threaded-end couplings, a metallic cap should be provided and screwed over the end when not in use. The cap should be fastened to the hose coupling by a chain to insure against losing it. Suitable storage should be provided, either on board the vessel or on the dock, for drinking-water hose, which should be easily identified so that it would not be used for any other purposes. Painting this hose white would be an inexpensive way of identifying it.

(2) For water boats, particular care should be given to the details mentioned above for protecting the water delivered to its tanks. The pump for delivering water from the water boat to the supply tanks on a vessel should be used for this purpose only and should be independent of all other water systems. In case water is transferred from the water boat to the supply tanks aboard a vessel, on the "siphon principle," special care should be taken in charging this siphon that only the drinking-water supply is used. Sterilization and flushing of storage tanks on water boats should be done weekly without fail.

The design and sanitation of water boats are very important public-health problems, if the delivery of water by this medium to other vessels for drinking and culinary purposes from certified sources ashore is to be free from the many potential dangers associated with The ideal type of water boat is one in which the storage tanks are of iron or steel, each tank having no openings or connections other than a bolted manhole, an intake pipe, a discharge pipe, and a connection for complete draining of the contents of the tank into the bilge. There are many water boats in which the tanks are constructed of plain cypress planks with tar-pitched joints. The deck of the vessel usually forms the top of such tanks; and unless extreme care is taken to maintain them in a tightly calked condition, there is grave danger of contamination of the water in the tanks by leakage from the deck through these unprotected seams. The hatches to such tanks should be of water-tight construction, kept locked at all times, and the edges should be protected by a leather or rubber gasket fitting closely to a raised flange.

For filling the tanks, a filling plug (provided with a cap) raised above the level of the boat's deck, to which the delivery hose from the dock may be connected, should be provided. The discharge pumps for delivering water from the water boat should be independent of all other water-supply systems or sources. It is essential that there should be no way by which any water other than that obtained from the certified source of supply ashore may be admitted to the storage tanks or delivered to another vessel for drinking and culinary

purposes from the water boat. Care should be taken to prevent contamination of the hose used aboard this type of vessel. Threaded caps should be provided for the protection of the hose ends when not in use. The decks should be kept in a clean condition.

Weekly sterilization and thorough draining and flushing of the tanks should be part of the routine procedure. A satisfactory method of sterilization is to allow a solution of hypochlorite of lime in the proportion of 1 pound of the chemical to every 5,000 gallons of water to remain overnight in the tanks while completely filled. In the morning the tanks should be emptied and then flushed thoroughly.

Great Lakes Vessels.

The method of supplying water for drinking and culinary purposes from sources ashore to Great Lakes vessels is similar in every respect to that for coastwise vessels. The same precautions relative to location, protection, and identification of hydrants described above should be taken. Water boats are not common on the Great Lakes.

At Buffalo, Detroit, and Chicago city water was supplied to Great Lakes passenger vessels operating during the 1921 season with satisfactory results. The following table is a compilation of the results of bacteriological analyses of samples collected from the drinking systems on these vessels in the summer of 1921 and analyzed by the local city health departments:

TABLE II.

							В	coli	dete	rmir	atio	ns.
Plant	Ves-	Course of supplies	Storage	Num- ber of	Average bacteria	P	ositi	ve.	N	egati	ve.	Per
Fleet.	sel.	Source of supply.	aboard.	sam- ples.	per c. c. 37° C., 24 hours.		C. c			С. с.		cent posi- tive,
						10	1	0.1	10	1	0.1	10 c. c.
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C D D	3 1 2 1	Buffalododo	do	48 41 11	200 330 410 18	13 12 1	7	0 0	35 29 10	44 34 11	48 41 11	27. 1 29. 3 9. 1

If one is to compare this table with the one (Table I) given for water supplies on Ohio River vessels he should bear in mind the point brought out by the sanitary experts reporting to the International Joint Commission in connection with their classification of Great Lakes water, given on pages 20 and 21 of the Progress Report of this

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commission dated January 16, 1914, from which the following is quoted:

"In considering this classification it is to be remembered that it is arbitrary. The classification arises out of the data contained in this report. The differences in bacterial flow of these lake waters and that of comparatively warm river waters, subject to agricultural and municipal drainage, is very great, especially when measured by bacterial counts on agar and B. coli, which represent almost invariably for these lake waters recently added sewage organisms."

By their classification, bacteria counts on agar which might be considered relatively low (under 100 per c. c.) in waters of some district could and probably would be associated with gross pollution of recent origin in the waters of the Great Lakes. The water supplies from Buffalo, Detroit, and Chicago are all obtained from the Great Lakes in areas subjected to pollution, the only treatment before delivery to the city mains being disinfection by chlorine. For this reason it is believed that the bacterial counts on agar reported in the above table are not of great sanitary significance where the determinations for B. coli were negative; for while stored in tanks aboard the vessels, especially if these tanks were in proximity to the engine rooms, "aftergrowths" of spore-forming bacteria of nonfecal origin might develop.

Tugs, Tender, Tows, Canal Barges, and Miscellaneous Craft.

The water supply for these smaller vessels, if obtained from sources ashore, should be delivered to and stored aboard the boat with the same care as that given to larger vessels. The gravity system with a storage tank or tanks on the cabin house is probably the most economical installation. The carrying of water aboard in pails and storing it in a keg or crock is very unsatisfactory from a sanitary standpoint for the reasons already outlined in this report. The practice of obtaining water for drinking and culinary purposes from overboard in a pail to which a rope is attached, which is so common on these small boats, is as primitive as it is vicious and insanitary. This practice is all the more dangerous on smaller craft, as they frequently navigate in harbors and relatively shallow waters near shore, which are usually grossly polluted by sewage. (See Fig. 4.)

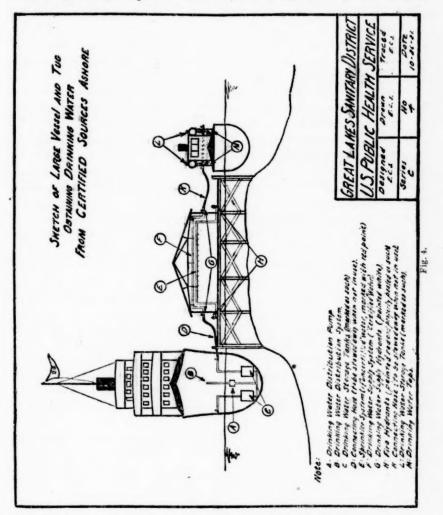
Conclusions.

1. Where water to be supplied for drinking and culinary purposes on vessels is obtained from sources ashore which are certified as producing water of satisfactory sanitary quality and safety, such water may, through excessive handling in delivery to and storage aboard a vessel, be so contaminated as to render it entirely unfit and unsafe for human consumption.

2. The methods by which drinking water was delivered to passenger vessels operating on the Ohio and Mississippi Rivers during the

summer, 1921, involved such excessive handling of this water that it was frequently contaminated and thereby rendered unsafe for human consumption.

3. Water obtained from sources ashore, where the hydrants are located on or at the pier or wharves, can be delivered to these vessels



through hose with a reasonable minimum exposure to contamination, if proper precautions are taken.

4. The method by which drinking water is stored aboard and distributed throughout a vessel is fully as important in protecting this water against contamination as the means by which it is delivered to the vessel.

Recommendations.

1. Where water to be used for drinking and culinary purposes on vessels is obtained from certified sources ashore, hydrants from which this water is to be drawn should be located on the pier, dock, or landing so that this water can be conveniently delivered to the vessel through a hose or pipe, with a minimum opportunity for exposure to possible sources of contamination.

2. Consistent with local conditions, the length of hose necessary to deliver water from the hydrant on the pier or landing to the boat

should be as short as practical.

(Note.—By installing a delivery pipe line from the lower deck of a vessel to the storage tanks, a length of hose necessary to connect the

hydrant to this delivery line will be all that is necessary.)

3. In river shipping, when the water for drinking and culinary purposes for a vessel is obtained from sources ashore, the hose connecting the hydrant on the landing to the wharf boat should be protected against possible contamination from being accidentally dropped into the river by attaching it to a guide board or passing it through a protecting conduit fastened to the gangplank.

(Note.—For delivery of water across the wharf boat a special pipe

line should be installed.)

4. In locating the drinking-water hydrants on piers, wharves, landings, and wharf boats, special consideration should be given to the nature of the traffic at these places, with a view to preventing contamination of the delivery hose connections on the hydrant.

5. All hydrants at which drinking water is obtained at the pier, wharf, landing, or wharf boat should be identified as such by a conspicuous sign of letters not less than 4 inches in height; and in case hydrants at which water for other than drinking purposes is available are located on the pier, wharf, landing, or wharf boat, they should be painted red and the drinking-water hydrants white, and both identified by signs.

6. The hose used for filling drinking-water tanks on vessels should be used for no other purposes, and it should be stored aboard the ship or at the pier, wharf, landing, or wharf boat so as to protect it

against possible contamination.

7. One of the licensed officers of every vessel should be designated as "water-supply officer" and held responsible for the drinking water provided on the vessel.

LET THE CHILD DO THE "FOLLOW-UP" IN SCHOOL HEALTH WORK.¹

By EDITH B. LOWRY, Acting Assistant Surgeon, United States Public Health Service.

Medical examination of school children has been carried on in a more or less efficient manner in some parts of the country for approximately 30 years. However, it required the revelations of the World War to start the wave of public opinion in favor of general health for children. Following the cessation of war activities, public opinion has been focused upon the physical condition of the children, as shown by the country-wide campaign for their weighing and measurement, and by the extensive practice of physical examinations and inspections. But, while the need for correction has been established, little has been accomplished as yet in the way of results. Moreover, there is danger that undirected or misdirected effort, failing in definite results and causing annoyance to teachers, may tend to close the schools to health activities.

Investigations proved that although in many cases the physical examinations had been made in a satisfactory manner, the correction of defects was anything but satisfactory. Notes sent to the parents were lost by the wayside or ignored at home; the few public health nurses could reach only an infinitesimal portion of the parents by home visits, which seemed to be the best method of obtaining results. "Lack of trained workers" was the cry everywhere. Efficient workers were unattainable even if funds were provided.

In an effort to discover some method of obtaining results without a prohibitive staff of home visitors, many schools were visited where physical examinations already had been carried on. Questioning the children revealed that the majority of them had forgotten the health advice given them, and the teachers were equally ignorant of the physical condition of their pupils. Everywhere the teachers expressed a desire for some form of record of the physical examinations that could be left in the schoolroom. The ordinary medical examination card was not of much value for this purpose, for the teachers already were overburdened with the multiplicity of duties and could not spend much time going over cards time and again, even if the records on the cards meant anything to them. The teachers, as a rule, were as poorly informed on the subject of health as were their pupils. In many instances the teachers themselves were in as poor physical condition as any of the pupils, some even were found with active tuberculosis, and the teacher with perfect teeth was almost as rare as the efficient health worker. "Yes; I know I should go to a dentist," was a remark frequently called forth.

Read at the meeting of the American Medical Association, Boston, June, 1921.

What were we to do about it and what was the solution? Somewhere memory brought forth the old saying, "When in Rome do as Romans do." This, translated according to present needs, meant, "When in the schools, follow the methods of the school people to which the children as well as the teachers are accustomed."

In all lines of education except health, educators have found it necessary to set a certain standard for the children toward which they can work. For instance, a third-grade child is required to learn a certain amount of arithmetic and be able to read certain books. He is not given the indefinite instruction to "Learn arithmetic," "Learn to read."

Following this line of thought, the question came whether it were possible to set a definite standard of health for the children rather than say to them, "Be healthy; be well," without giving them an adequate idea of what health meant.

In the course of child-hygiene investigations by the Service in Mississippi it was suggested that a definite requirement be set for the health of school children for the current year. This suggestion was adopted by the State health department and the State department of education. Later it was adopted by the Kentucky division of child hygiene with satisfactory results.

The requirement outlined is as follows:

Eyes-

- (a) Vision normal or corrected by glasses.
- (b) No evidence of disease or inflammation.

Ears-

- (a) Hearing normal.
- (b) No evidence of disease or inflammation.

Nose-

- (a) No adenoids.
- (b) No other obstruction.

Throat-

- (a) No diseased or enlarged tonsils.
- (b) No evidence of disease or inflammation.

Mouth-

- (a) No unfilled cavities in teeth.
- (b) Teeth clean, showing evidence of daily care.
- (c) Gums healthy.

Skin-

- (a) No eruption.
- (b) Scalp clean, free from scales.
- (c) Scalp free from pediculosis.

Chest-

- (a) No evidence of disease or inflammation of lungs.
- (b) Chest expansion of at least 2 inches.

Vaccination_

Good scar or certificate of recent vaccination for smallpox.

Good 8

- (a) Weight normal or not more than 10 per cent over.
- (b) Negative hookworm report.
- (c) No enlarged spleen (malaria).

No claim is made that this is an ideal health standard, but it is claimed to be a standard that should and can be lived up to by every person, whether child or adult. The requirement purposely was set sufficiently low so that it would be possible for it to be reached by practically every child in school who made the effort. For this reason, no mention was made of cardiac lesions, for instance, as such a condition probably could not be corrected by the child. The child should not be discouraged by an impossible standard.

The outline was arranged to take in the more obvious defects and does not include many defects that would be noted on a more rigid examination, the object being to interest the child in his own health and to secure his cooperation in having these more common defects corrected. As the health condition of a school improves from year to year, the requirement can be raised accordingly. How common the defects mentioned in the requirement are in the average school is shown by the fact that it is rare to find more than one child in a room (with the exception of a few cities) that meets all the requirements. The greatest failure was under the requirement for mouth, and the failure for throat requirement followed a close second.

HEALTH SCORE CHART.

In order to visualize health to the pupils and teachers, to give it a definite meaning, a Health Score was devised which tells at a glance the physical condition of the children in the room.

The charts were designed, first, to meet the request of teachers for a record to be left in the school and, second, to impress upon the children the ideal of health. In other words, "It is a record in the language to which children are accustomed." Charts and stars are used in practically every school all over the country. By the use of these charts the child himself is stimulated to do "follow-up work" in the home. It is felt that in his desire to "follow the crowd" and have a gold star placed before his name, his importunities will be more successful in securing the attention of the parents than any other method.

What the Health Score means in the school room is this: The principal of the school is visiting this room and hears a little child read very badly. Looking at the Health Record he probably finds that the child has no star in the column headed "Eyes." The thought comes immediately, "Why, that child has something the matter with his eyes." At once health is a vital subject to him.

On the Health Score a red star indicates that the child was, on the original examination, up to the standard in the subject indicated at the head of the column. For instance, a red star in the column marked "Eyes" indicates that at the time of the first examination the child's vision was normal or corrected by glasses; also that there was no evidence of disease or inflammation.

Blue stars indicate corrections. For example, if the child had poor vision and later had this corrected by glasses, and there was no evidence of disease or inflammation, he would be entitled to a blue star under "Eyes." The two colors simply show graphically whether any corrections are being obtained.

Gold stars are placed before the names of children who have met all health requirements, that is, when every space following the child's name is filled with either a red or a blue star.

An especially designed health button may be presented to every child who has obtained a gold star. This should be presented with as much ceremony as a diploma, for we consider that any child who has given the nesessary attention to his health to become a gold star pupil is entitled to some recognition.

The following instructions are given for using the Health Score Chart, which is intended to be used in connection with the height and

weight record.

Names.—The names of the children should be filled in plainly with black ink in the same order as they appear on the classroom weight chart. The two charts are companions and should be hung together in the schoolroom in such position that they can

be seen readily by the pupils.

Red Star.—Red stars are stamped in the various columns when the child is free from defects or is up to the standard of the subject indicated at the head of the column at the time of the original medical examination. For example, a red star in the column marked "Eyes" indicates that at the first examination the child's vision was either normal or had been corrected by glasses, and also that there was no evidence of disease or inflammation of the eyes.

Blue Star.—Blue stars indicate correction. For example, if at the time of the first medical examination the child had poor vision, which was later corrected by glasses and there is no evidence of disease or inflammation, he would be entitled to a blue

star under the heading "Eyes."

Gold Star.—A gold star is placed in the column in front of the name of the child who has met all the health requirements; that is, when every space following the child's

name is filled with either a red or blue star.

Two Gold Stars.—Two gold stars may be placed in the column in front of the name of the child when it is impossible for the child to obtain relief from certain physical defects, even though everything possible has been done. In such a case the child may have two gold stars after all other corrections have been made. For example, if a child's deafness is such that it is impossible to correct it, even though everything possible is done; or if a child suffering from chronic infantile paralysis has met all the other requirements of the health score card, then he is entitled to the two gold stars.

The child should not be given a health button in such case until after conference

with the director of the State division of child hygiene.

Health button.—In order further to stimulate the interest of the child in completing the health score, an award in addition to the gold star should be made in the form of a health button, after the physician in charge of the examination finds that he has completed the health score.

The health button should show the year in which it is given so that if the score is changed another year, or the child develops defects, there will be no question con-

cerning his right to wear the button. The health button should be furnished by the State division of child hygiene.

The presentation of a health button should be an occasion of special ceremony, and the child's parents should be invited to attend.

How to make out the Health Score record.—The health record can be made in the office from the school examination cards. It will save time to make the entire chart before adding any stars, indicating by "O" the space for red stars and then pasting or stamping the stars over these letters.

Every space after a child's name should be marked in some manner, as blank spaces will indicate that the examination has not been made.

Indicate by "a," "b," or "c" the defects found, using the Health Score Chart as a guide. Example:

In the column headed "Eyes"-

If the examination has not been completed, leave this space blank.

If vision is normal and there is no evidence of disease or inflammation, put an "o" in this space.

If vision is normal but there is some inflammation, use a "b."

If vision is defective but there is no inflammation or disease, use an "a."

If vision is defective and there is also inflammation, use "a-b."

Again, under nutrition, a small "a" will indicate under weight, while a capital "A" will indicate those who are over weight for a given age. This will make it easy to distinguish the children who are under weight and those who are over weight.

By using this method it will be easy to make a summary of defects from the chart, as by adding all the "a" marks in the column under "Eyes" the total number with defective vision will be found.

CLASSROOM WEIGHT CHARTS.

The following instructions are given for the use of the Weight Chart:

Names of the children should be filled in by the teacher in alphabetical order, surname first. Use black ink.

Age (nearest birthday) should be filled in by the teacher. Use black ink.

Height should be recorded in inches. Height should be taken without shoes, as the heels of shoes vary in height. Use black ink.

Normal weight can be found by consulting height and weight tables. The normal weight column should be filled in with red ink.

Monthly weight may be filled in first with pencil, then inked according to the following directions:

(a) If a child is of normal weight or not more than 10 per cent above, use red ink. This calls attention to the children who have reached the goal.

(b) If the child is below normal weight or more than 10 per cent above, use black ink. Weight should be taken without shoes, coats, or sweaters.

Later weighing.—Arrangements should be made to have the children weighed every month, as this will show whether they are improving in nutrition. In some cases the nurse or permanent worker will have time to do this; in others the teachers will do the weighing; in other cases a committee of two mothers will volunteer for this help; sometimes this may be assigned to one of the older pupils. In all cases the weighing should be done as nearly as possible on the same day of the month.

Scales.—Every school building should have good balance scales as a part of the permanent equipment. Do not buy spring scales, as they get out of order easily and are not reliable. It is economy to buy good scales. A description of scales and price

lists will be furnished from this office on request. The money to buy scales may be obtained in several ways, among which are the following: (1) Appropriated from school funds; (2) purchased from funds of parent-teacher organization; (3) purchased from Christmas seal money; (4) purchased from Junior Red Cross funds; (5) purchased by proceeds from entertainment or "tea" given for this purpose.

These charts are designed to be left in the schoolroom. They are supplied by the State. They may be obtained from the United States Public Health Service or the Bureau of Education, Department of the Interior, Washington, D. C.

U. S. Public Health Service, Health Score of the Children in Grade, Schoul.

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Class score at beginning of session, ----. Class score at end of session, -----

Teacher.

U. S. PUBLIC HEALTH SERVICE.

Weight record of the children ingrade.....grade....

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Height and weight to be taken in house clothes without shoes. Weigh on the same day each month. Age, the nearest birthday. Each child to enter his own weight.

CASES OF INFLUENZA REPORTED BY STATES.

COMPARISON OF THE FIRST 10 WEEKS OF THE YEARS 1920, 1921, AND 1922.

The accompanying table shows the number of cases of influenza reported for the first 10 weeks of 1922 by 24 States, compared with similar reports for the corresponding weeks of the years 1920 and 1921.

All weeks ended on Saturday. The first week of 1922 ended January 7; in 1921 the first week ended January 8; and in 1920 it ended January 10.

Number of cases of influenza reported by States for the first 10 weeks of the years 1920 to 1922, inclusive.

					Week	number				
State.	First.	Second	Third.	Fourth.	Fifth.	Sixth.	Sev- enth.	Eighth.	Ninth.	Tenth.
Alabama:										
1922	2		5	3	26	95	29	20	31	185
1921						5	11		7	14
1920			8	203	1,296	3,236	2,366	3,603	3,885	1,047
Arkansas:				40	191					
1922	83	40	64	88	192	232	158	202	371	409
1921	63	78	75	37	52	70	19	94	63	88
1920	35	53	179	595	5,663	6,599	2,793	1,690	2,576	2,055
California:	90		- 00	40				10 000		
1922 1921	38 22	23	28 30	48	92	845	4,315	10,033	9,917	4627
	32	322		37	12 000	98	7 400	194	143	149
1920 Connecticut:	02	022	1,604	7,133	13,660	11,887	7,420	5,527	918	496
1922	5	7	9	22	109	518	1,325	675	711	400
1921	13	14	13	13	8	9	1, 525	18	18	486
1920	1	14	1, 123	4,664	5,666	4,868	2,771	1,183	571	229
Delaware:			2, 220	4,004	0,000	4,000	-, 111	1,100	011	223
1922			5	2	7	2	2	9		2
1921	9	12	12	4	2	7	19	20	19	10
1920	1		5	21	86	78	43	36	50	33
District of Columbia:		-							0.0	
1922	1	3	4	7	5	9	- 8	7	9	9
1921	2	2	2	4	4	1	1	1	4	8
1920	9	126	1,216	1,616	557	298	104	36	21	6
Florida:				1			-			
1922	3	6	21	6	15	35	123	118	68	72
1921	6	3	4	10	3	6	4	4	6	12
1920	2	10	484	1,547	1,581	1,735	1,420	1,026	580	413
Georgia:		- 10								
1922	21	19	52	64	74	81	128	162	179	149
1921	30 27	24 27	26	25	37	26	35	8	32	44
Illinois:	24	21	95	617	3,256	5,411	7,809	8,210	3,677	3,087
1922	25	49	38	125	108	417	633	1,069	809	735
1921	42	18	27	19	28	35	34	23	19	15
1920	73	3, 251	14,805	29, 156	30, 330	23,037	7,237	3,062	1,344	453
Cansas:		, 201	22,000	20,100	00,000	20,001	1,201	0,002	1,044	200
1922	9	23	88	121	364	440	480	901	626	557
1921	13	9	13	29	5	9	. 9	12	5	6
1920	17	45	1, 130	8,582	16,960	17,699	10,026	3,590	3,332	1,551
Centucky:				,	,,,,,,	,	-,	-,	,	-,002
1922	17	25	18	51	332	640	705	748	1,088	
1921	10	8	49	19	33	21	25	28	53	13
1920	45	75	170	878	2,536	6,067	4, 295	8,584	4,099	3,640
ouisiana:			1							
1922	7	8	4	8	10	39	36	368	469	1,603
1921	39		******	10 .	******		22	******	******	******
1920	52	27	123	763	1,901	3,690	3, 153	3,363	2,541	1,982
1922	5	9	40		-					
1921	18	6	18	14	97	145	131	441	487	352
1920	1	4 .	12	387	026	2 049	2 700	0 124	1 120	1 105
laryland:	4	4 .		994	936	3, 942	3,702	2,134	1, 130	1, 105
1922	21	40	52	93	110	189	263	431	612	814
1921	70	79	82	107	125	164	143	279	368	367
1920			6.00	401	4, 935	8,942	4,758	3, 184	2,052	1,206

Number of cases of influenza reported by States for the first 10 weeks of the years 1920 to 1922, inclusive—Continued.

					Week	number				
State.	First.	Second	Third.	Fourth	. Fifth.	Sixth.	Sev- enth.	Eighth	Ninth.	Tenth
Massachusetts:										
1922		12	18		398		1,764	1,285	904	52
1921		63	39		17	37	32		20	35
1920	46	58	489	4, 495	9,627	10,747	5,601	2,375	1,144	490
Missouri:	-	1	1 .	-					1	
1922		16	8		71	99	234	313	406	279
1921	51	48	40		26		30	22	23	28
1920		*******	******	4,043	5, 359	1,696	466			
Nebraska:		1								
1922 1921	3	*******			6	6	10	161	66	110
	2	1	1	1	9	2	*******	5	*******	
1920 New Jersev:	2	1	154	1,815	3,998	6,048	3,272	2, 492	2,007	834
1922	28	36	40	100	100	1 000				
1921	34	26	22	126	426 32	1,288	1,555	918	512	221
1920	23	98	753	33		20	94	51	85	105
New Mexico:	20	93	100	7,365	9,603	5,807	2,798	1,043	764	365
1922			1		10	14	35	92	204	000
1921	******			2	1	6	- 00		304	209
1920	8	4	61	260	1,576	1,166	632	204	100	
lew York (exclusive			01	200	1,010	1,100	032	204	186	97
of New York City):				1						
1922	28	48	80	173	694	771	1,577	1,568	1,774	1 079
1921	86	109	96	79	43	44	63	44	47	1,973
1920	31	61	555	4,755	11,616	13, 259	11,304	5,330	4,030	2, 434
lew York City:	-		000	1,.00	11,010	10, 200	11,001	0,000	4,000	6, 101
1922	56	57	110	1,230	5, 731	7,070	3, 284	1,312	592	310
1921	134	78	84	72	59	84	109	102	101	124
1920	100	384	5,690	30, 456	21,388	8,091	3,030	1,069	489	381
exas:			-,	00, 200	,	,,,,,,	0,000	2,000	400	001
1922	48		5	5	57	141	123	76	353	1.181
1921		24			9	113	8	39	000	79
1920					11, 265	6,788	1,035	588	134	55
ermont:					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,	-,	-		00
1922		1		1	7	2	12	1	2	15
1921	5	1	2	3	6	1		3	ī	1
1920			25	89	272	796	1,314	1,071	481	470
Vashington:								, ,		
1922			1	33	176	1,061	902	360	389	81
1921										
1920			12	902	6, 451	6, 426	4,596	1,559	1,260	271
Visconsin:									1	
1922		17	59	22	24	37	22	73	129	321
1921	64	81	44	43	25	48	22	62	24	28
1920	3	67	1,944	6, 739	14, 328	10, 310	6, 274	3, 131	994	554
otal:		410	mán							
1922	457	416	728	2, 328	9, 141	15,645	17,854	21,343	20,808	15,230
1921	790	710	666	612	525	840	694	1,015	1,038	1, 176
1920	508	4,627	30,625	117,081	184, 849	168, 623	98, 219	64,090	38, 265	23, 254
umber of States re-										
porting cases: 1922.	19	17	00	00	04	20	04	0.1		
	21	17 20	22 19	22 21	24	24	24	24	23	23
1921 1920	18	17		21	20	22	19	20	18	22
1040	10	14	20	22	24	24	24	22	23	23

DEATHS FROM INFLUENZA AND PNEUMONIA COMBINED.

COMPARISON OF THE FIRST 10 WEEKS OF THE YEARS 1919-1922, INCLUSIVE, FOR CERTAIN LARGE CITIES OF THE UNITED STATES.

The accompanying table gives the number of reported deaths from influenza and pneumonia (all forms), combined, during the first 10 weeks of the years 1919, 1920, 1921, and 1922, in 36 large cities of the United States.

This is a continuation of the table printed on pages 535-537 of the Public Health Reports of March 10, 1922 (vol. 37, No. 10).

The weeks for which figures are given all ended on Saturday, the "first" week for each year ending on the following days, respectively: January 4, 1919, January 10, 1920, January 8, 1921, and January 7, 1922.

The figures for 1919 and 1920 were taken from the Weekly Health Index, issued by the Bureau of the Census, Department of Commerce, supplemented by reports to the Public Health Service. For 1921 and 1922 the figures are taken from reports made by the city health officers to the Public Health Service.

Blanks in the table indicate that no reports of deaths from influenza or pneumonia were received for the week. This does not always indicate that no deaths from these diseases occurred.

Number of deaths from influenza and pneumonia (all forms) combined.

					Week 1	number.				
City.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.
mingham, Ala.:									-	
1922	8	10	14	6	13	4	4	14	9	7
1921	7	14	6	4	9	9	12	6	13	7
1920	13	9	16	14	22	18	59	70	76	45
1919	36	44	52	41	29	21	28	25	1 10	1 10
Angeles, Calif.:										
1922	18	19	14	21	26	29	33	79	84	69
1921	12	19	9	13	15	12	17	15	15	16
1920	16	18	19	22	42	88	74	57	49	20
1919	99	151	178	177	104	47	21	8	14	8
land, Calif.:	00	-04	.,0							
922	4	. 5	5	6	8	8	12	12	16	18
1	4	3	8	7	. 9	4	6	4	5	9
0	4	8	20	24	55	54	60	21	17	19
	66	92	111	67	38	18	18	13	4	14
	66	92	111	01	99	15		. 0	•	**
ncisco, Calif.:	- 44	1 .01		10			90	70		0.1
	11	12	4	12	9	15	36	79	51	31
		5	8	9	7	11	13	6	11	11
	14	26	48	59	115	137	118	89	54	32
**********	194	290	310	149	89	41	20	18	21	22
Colo.:								1		
	22	11	10	17	18	16	19	22	26	40
	25	22	23	11	16	21	20	13	21	13
	21	18	24	49	159	160	67	. 44	21	10
	65	47	35	24	29	30	37	29	27	27
i, Conn.:			-							
	5	1	5	4	13	10	14	30	27	23
***********	4	7	7	7	2	6	9	9	11	
**********		8	10	19	20	60	68	31	23	17
	40	38	27	26	20	12	11	6	13	12
ton, D. C.:	40	99		20	20	10	-1	9	2.0	
on, D. C.:	20	22	27	27	25	22	27	26	27	22
	20	22	14	9	9	12	19	24	22	22
*********	22	27					55	30	23	20
			81	181	164	92 42	. 40	28	35	38
	139	109	107	73	60	42	40	20	99	33
ia.:	10	-		-	00	17	3.5	10	10	00
	13	7	9	7	20	17	11	16	13	20
**********	10	8	9	5	7	18	10	11	7	6
	19	11	10	15	32	75	104	75	46	26
	1 40	1 40	1 54	1 57	1 54	1 28	1 21	1.25	1 12	1 13
Ill.:									1	
	48	43	63	65	72	80	56	94	139	150
1	64	79	59	102	92	90	75	79	84	72
	107	153	472	1,109	1.005	494	243	136	120	108
	321	269	328	341	277	194	235	233	230	213
olis, Ind.:			Com.							2.0
rous, and	20	11	9	17	29	42	39	38	36	24
	15	12	13	13	21	6	13	6	9	5
	18	16	21	36	92	124	72	49	41	20
		40	25	28	23	23	28	33	34	34
1919	34	90)	40 1	60 1	60	40	40 1	60	0.3	0.8

¹ Pneumonia (all forms) deaths only.

Number of deaths from influenza and pneumonia (all forms) combined-Continued.

					Week	number.				
City.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.
Louisville, Ky.:										
1922	6	12	18	7	16	24	28	25	19	16
1921	6	4	5	5	40	52 52	9	13	8 20	10
1920	10	10 20	9 21	18 30	20	19	48 19	30	34	18 88
New Orleans, La.:	22	20	21	30	20	13	1.0	91	94	co
1922	13	14	14	13	19	25	20	19	31	52
1941	18	18	21	23	12	21	23	14	16	26
1920	27	27	27	32	36	62	89	- 76	56	59
1919 Baltimore, Md.:	94	141	202	201	125	58	49	44	30	27
1922	32	25	24	26	29	27	29	40	47	71
1922	33	20	24 24	18	26	56	44	44	43	68
1920	20	35	24	59	122	268	231	123	80	65
1919	48	75	83	150	138	126	117	90	66	51
boston, Mass.:	-		36	28	33	38	51	83	84	61
1922	21 27	17 23	36	33	22	10	26	21	23	29
1921 1920	28	28	45	85	158	255	216	136	80	48
1919.	244	227	158	153	110	89	71	72	70	69
1919 Cambridge, Mass.:										
1000	. 5	8	3	4	7	7	8	9	8	16
1921	4	5	5	5	1	3	23	4		6
	39	7 22	20	14 16	22	28 10	3	13	4 2	5
1919. Fall River, Mass.:	39	22	20	10	-0	10	"		-	
1922	5	4	3	6	5	7	9	22	29	24
1921	14	5	11	4	5	8	5		12	15
1920	7	10	5	3	5	16	25	19	18	14
1919 Lowell, Mass.:	10	18	16	14	17	17	15	17	13	12
Lowell, Mass.:		7	5	4	4	6	5	13	11	4
1922	7	6	8	3	6	4	2	3	6	6
	5	4	2	7	12	10	36	29	27	16
Worcester, Mass.:	13	1 10	20	26	11	17	18	4	13	9
Worcester, Mass.:				_						
ACME	5	10	11	7 9	16	16 10	16	15	13	13
1921	10	7 9	13	14	15	44	52	34	59	18
1920	40	36	44	22	23	21	23	28	8	20
1919 Minneapolis, Minn.:		00		-						
	10	6	9	9	6	9	4	- 8	19	20
1921	13	14	10	8	10	16	20	18	14	13
1920	12	10	9 24	63	168	125 31	53 14	13 34	17	18 29
1919 St. Paul, Minn.:	37	45	24	02	91	- 01	14	01	**	20
1922	7	13	7	3	8	6	6	5	9	18
1921	9	5	9	9 .		7	8	5	8	12
1920	4	10	26	75	80	63	26	14	5	10
Kansas City, Mo.:	39	25	14	12	15	13	11	12	15	14
Kansas City, Mo.:	12	10	14	25	25	28	39	71	52	41
1922 1921	15	13 17	19	13	14	17	16	16	10	15
1920	13	29	96	120	220	167	74	53	29	23
1919	49	50	68	45	58	40	51	46	55	47
1919 Omaha, Nebr.:									10	
1922	11	9	17	12	16	12	11	17	16	9 7
1921	8	7	4	14	62	63	32	28	19	13
1920	25	7 25	13	45 17	11	12	10	12	9	16
1919. Newark, N. J.:	20	20	**		**					
1922	13	15	20	20	33	33	39	37	28	20
1921	18	14	15	7	12	13	12	13	11	20
1920	17	14	30	55	116	142	93	54 46	34 54	24 38
1919 Buffalo, N. Y.:	72	66	57	53	50	45	04	40	04	99
1099	6	20	13	19	21	15	15	20	22	36
1922	20	18	18	20	13	18	20	18	13	2
1920	10	7	19	17	67	141	145	98	56	38
1919	48	1 19	90	123	90	75	35	34	44	20
New York, N. Y.:			-	000	401	FOC	270	240	404	994
1919. New York, N. Y.: 1922.	215	263	284	302 203	481 199	596 212	576 212	548 269	404 268	331 239
1921 1920 1919	235 218	216 261	511	1,308 1,193	1,988	1,796	987	513	369	317
AUMU	753	870	998	1 102	1, 153	893	786	788	864	747

Pneumonia (all forms) deaths only.
Influenza deaths only.

Number of deaths from influenza and pneumonia (all forms) combined—Continued.

					Week	number.				
City.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.
Rochester, N. Y.:										
1922	5	11	12	14	6	7	14	11	11	1
1921	4	3	6	8	5	5	27	19	12	1
1920	13	7	12	23 21	50 12	52 16	16	18	12	11
1919. yracuse, N. Y.:	59	26	17	21	12	10	10	10	'	
vracuse, N. I	4	6	4	- 6	7	7			7	
1922	4	8	3	5	6	2	7	4	9	
1920	9	8	10	31	80	78	29	23	11	
1919	8	13	4	14	18	10	10	18	19	1
neinnati, Ohio:										
1922	14	20	15	19	21	27	41	54	49	4
1921	14	16	13	11	18	16	17	16	15	1
1920	14	12	17	25	38	62	81	99	73	3
1919	51	18	18	26	23	39	37	78	90	10
eveland, Ohio:			30	28	25	18	25	60	55	6
1922	25	22	23	24	31	28	31	27	34	2
1921	21	25	26	41	158	258	177	125	71	5
1920 1919	132	94	92	92	108	100	80	82	94	13
dumbus, Ohio:	202		02	1 1	200				-	
1922	5	9	4	10	8	6	10	11	13	2
1921	8	8	12	12	13	12	7	9	9	
1920	15	9	8	22	59	118	66	48	19	1
1919	15	14	10	20	19	11	15	20	27	2
oledo, Ohio:										
1922	6	9	8	12	7	6	5	6	10	1
1921		3	9	10	5	4	3	8	.7	
1920	9	8	9	18	54	50	50	26 21	15 14	13
1919	19	15	19	20	15	6	11	21	14	2
ortland, Oreg.:	4	7	4	6	5	15	17	27	32	2
1922	6	5	7	6	4	8	5	4	4	1
1920	13	8	9	17	21	57	52	41	28	1
1919	55	101	123	122	50	15	10	12	7	
hiladerphia, Pa.:	- 00				-					
1922	73	98	87	86	85	91	101	162	136	143
1921	72	83	85	101	114	108	115	108	128	10
1920	55	75	108	153	289	564	620	373	217	15
1919	142	194	229	259	308	262	232	. 231	207	18
rovidence, R. I.:			**				- 00	32	20	1
1922	13	8	12	17	11	15 11	26 9	14	39	1
1921	14 12	13	5 8	8	14 39	88	92	57	37	1
1920	47	50	62	61	35	30	28	11	21	3
ashville, Tenn.:	31	30	02	01	00	00		**		
1922	2	7		3	5	5	4	10	17	1
1921	2	8	4		10	9	9	9	10	1
1920	6	11	6	12	8	23	47	62	33	20
	20	17	21	21	17	15	16	23	19	1
chmond, Va.:			-							
1922	8	9	9	4	8	9	12	21	10	1
1921	5	- 5	13	6	5	7	10	9	13	
1920	2	9	6	21	35	38	28	13	8	
1919	50	26	34	30	23	11	9	9	10	19
The tale		-								
Total:	071	761	823	070	1 140	1, 298	1,362	1,736	1,608	1,500
1922 1921	671 750	737	738	872 725	1,140 738	800	836	848	891	837
1920	802	947	1,771	3 820	5,657	5, 922	4, 314	2,721	1,858	1,356
1919		3,346	3,688	3,820 3,756	3, 180	2, 427	2, 167	2, 191	2, 209	2,159
********	200	alara.	-,	2,000	-1-00	-,	-,	-,	-,	-,

¹ Pnemonia (all forms), deaths only.

DEATHS FROM LETHARGIC ENCEPHALITIS IN THE UNITED STATES REGISTRATION AREA, 1920.

The Department of Commerce, through the Bureau of the Census, has issued a statement showing the number of deaths from lethargic encephalitis in 1920. This disease is often called "sleeping sickness," although the true "sleeping sickness" is a very different disease and is found principally in Africa.

In 1920, in the death registration area of the United States, lethargic encephalitis was given as a cause of death on 1,505 death certificates, as against 589 in 1919, giving mortality rates, respectively, of 1.7 and 0.7 per 100,000 population.

Deaths from this cause were reported for every State in the registration area except Delaware; the largest number in any one State was 364, reported for New York State, a rate of 3.5 per 100,000 population.

Cities are credited with 1,129 of the 1,505 deaths, and rural sections with 376, or mortality rates, respectively, of 2.6 and 0.8 per 100,000.

The white population, with 1,453 deaths from lethargic encephalitis, has a rate of 1.8 per 100,000 population, while the colored population, with only 52 deaths, has a rate of 0.7. Males and females contribute about equally to the total deaths from this cause, with 781 males and 724 females.

More of these deaths appear for persons aged 20 to 29 than for any other age group, though nearly as many are found for the age groups 30 to 39 and 40 to 49, and no age group escapes entirely.

Number of deaths reported as due to lethargic encephalitis in the registration area (exclusive of Hawaii) and each registration State, 1919 and 1920.

Area.		argic halitis use of	Area.	death cates leth encep as car	giving argie
	1920	1919		1920	1919
Summary.			Registration States-Continued.		
The registration area	1, 505	589	Massachusetts	53	25
D 11 11 01 1			Michigan	94	18
Registration States	1,476	564	Minnesota	43	25
Cities in registration States	1, 100	323 241	Mississippi	20	19
Rural part of registration States Registration cities in nonregistra-	310	241	Missouri	6	19
tion States	29	25	Montana Nebraska	14	(1)
All registration cities	1, 129	348	New Hampshire.	2	(,)
An registration cities	1, 129	949	New Jersey	59	23
Registration States.			New York.	364	81
accysos actor States.			North Carolina	20	11
California	57	49	Ohio	97	35
Colorado	14	ĭ	Oregon	23	10
Connecticut	40	13	Pennsylvania	142	20
Delaware		3	Rhode Island	8	3
Florida	14	2	South Carolina	18	6
Illinois	92	55	Tennessee	17	12
Indiana	35	23	Utah	3	
Kansas	21	5	Vermont	3	
Kentucky	20	10	Virginia	24	34
Louisiana	14	16	Washington	68	24
Maine	9	1	Wisconsin	24	14
Maryland	36	5	District of Columbia	14	2

¹ Not added to registration area until 1920.

Deaths reported due to lethargic encephalitis, by age, sex, and color, in the registration area (exclusive of Hawnii), 1920.

		Males.			Females.	
Age.	Total.	White.	Colored.	Total.	White.	Colored.
All ages	781	755	26	724	698	26
Under 1 year	15	15		. 15	11	4
l year	16	15	1	25	24	1
years	19	17	2	12	12	
years	10	9	1	14	13	1
years	8	8		15	15	
to 9 years	41	39	2	47	45	1
0 to 19 years	91	89	2	90	89	
20 to 29 years	152	147	5	122	118	
30 to 39 years	127	122	5	119	115	
10 to 49 years	141	136	5	123	116	1 7
50 to 59 years	102	100	2	70	69	1 1
00 to 69 years	43	42	1	53	53	
70 to 79 years	12	12		14	14	
00 to 89 years	2	2		2	2	
0 years and over				3	2	1
Unknown age	2	2				

DEATH RATES IN A GROUP OF INSURED PERSONS.

DEATH RATES FOR PRINCIPAL CAUSES, DECEMBER AND YFAR, 1921, AND JANUARY 1921 AND 1922; AND COMPARISON BY COLOR FOR THE LAST QUARTERS OF 1919, 1920, AND 1921.

The accompanying tables are taken from the Statistical Bulletin of the Metropolitan Life Insurance Co. for February, 1922. They present the mortality data of the industrial department of the company for December, 1921, and January, 1921 and 1922, and compare, by color, the death rates for the last quarters of the years 1919, 1920, and 1921.

The gross death rate among this group was slightly lower in January, 1922 (9.1 per 1,000) than in the corresponding month of either 1921 (9.5) or 1920 (10.4).

The death rate from influenza was slightly higher for January, 1922 (12.6 per 100,000) than for the same month of 1921 (10.2). The pneumonia death rate for January, 1922 (101.5 per 100,000), although it showed an increase over the rate for December, 1921 (76.5), was lower than the rate for January, 1921 (106.0).

The death rate for tuberculosis for January, 1922, was much lower than the rates for this disease for December, January, and year, 1921.

Increases in death rates over those for the corresponding period of 1921 are shown for organic heart disease, cancer, and Bright's disease.

Death rates (annual basis) for principal causes per 100,000 lives exposed, December and year, 1921, and January, 1921 and 1922.

[Industrial Department, Metropolitan Life Insurance Co.]

Death rate per 100,000 lives exposed.			
December, 1921.	January, 1921.	Year 1921.1	
885.9	948.7	853. 8	
6.0 1.3 5.5 1.1 31.3 7.2 105.6 90.5 70.6 70.6 124.9 76.5 16.2 7.1 71.9 6.9 9.7 6.5	3.7 3.0 10.2 3.8 28.4 10.5 107.7 66.6 64.1 127.7 106.0 18.5 8.8 68.9 9 17.5 7.7 7.7 7.2	6.6 3.1 6.9 23.3 8.6 115.1 103.6 70.4 60.9 115.0 66.5 14.1 13.9 66.7 7.9 5.6 6.6 6.6 6.6	
the same of the sa	6.9 8.4	17. 0 17. 5 6. 9 7. 7 8. 4 7. 2 50. 2 50. 7 12. 5 7. 8	

¹ Based on provisional estimates of lives exposed to risk in 1921

Death rates (annual basis) per 100.000 persons exposed for principal causes, compared by color, for the last quarters of the years 1919, 1920, and 1921.

[Industrial Department, Metropolitan Life Insurance Co.]

Cause of death.	Death rate per 103,000 persons exposed.						
	White.			Colored.			
	OctDec., 1921.	OctDec., 1920.	OctDec., 1919.	OctDec., 1921.	OctDec., 1920.	OctDec., 1919.	
All causes of death	752. 4	771.9	781.3	1, 262. 8	1,303.7	1, 305. 3	
Typhoid fever	6.4	7.5	6.9	16.7	14.6	18.2	
Measles	.8	2.7	2.8	.5	.3	.5	
Scarlet fever	5.4	7.1	4.8	.7	1.3	1.1	
Whooping cough	1.3	3.8	2.5	2.1	6.3	2.9	
Diphtheria and croup	32.0	32.2	33. 2	17.2	9.3	10.7	
Influenza	5.3	5,5	9,8	12.2	14.1	18.2	
Tuberculosis (all forms)	0.0						
Tuberculosis (all forms)	81.0	97. 2	106. 2	233.8	259. 9	281. 2	
Tuberculosis of lungs		87.2	95. 8	214.7	235.3	259.3	
Tuberculous meningitis Other forms of tubercu-	2.9	4.8	5.1	4.5	6.8	6.7	
losis	5.0	5.3	5.4	14.6	17.8	15, 2	
Meningitls (total)	4.4	3.9	5.3	5.3	3.3		
Carabral harnorphage and	4.4	3, 9	0.0	0.0	0.0	4.3	
Cerebral hemorrhage; apo-	***	***	*** **	00.0	000		
plexy	58. 4	53. 5	53. 3	92.2	92.2	90.5	
Organic diseases of heart		97.6	95. 5	166.5	152. 2	154.6	
Total respiratory diseases	66.7	66.7	70.5	119. 4	115.3	118.3	
Bronchitis		5.6	6.6	9.3	10, 3	10.1	
Bronchopneumonia Pneumonia (lobar and un-	19.6	20. 5	21.7	28.2	25. 9	25. 6	
defined)	33, 6	33, 0	31.8	69.5	67.3	71.8	
Other diseases of respira-	,00.0	00.0	00	1	1	1	
tory system	7.9	7.7	7.5	12.4	11.8	10.7	
Diarrhea and enteritis		15. 9	15.9	10.5	17.1	17.9	
Under 2 years		7.4	7.2	1.7	4.3	4.5	
2 years and over		8.5	8.7	8.8	12.8		
2 years and over	0.7					13. 4	
Nephritis and Bright's disease.		64.0	67. 4	124.7	123. 5	124. 4	
Total puerperal state		15.7	14.9	24. 8	27. 9	26.7	
Puerperal septicemia Puerperal albuminuria	5.8	6.1	4.6	8.6	14.8	13.1	
and convulsions Other diseases of puerperal	3.9	4.0	4.5	8.4	5.3	6.4	
state	5, 4	5,6	5, 8	8.1	7.8	7.2	
Total external causes 1	61, 4	67.6	67, 4	89.3	97. 9	90.5	
Suicides	7.3	6.6	4.9	6.4	3.0	5.6	
Homicides	4.4	3.1	. 3.1	28.9	29. 4	27. 0	
Accidental and unspeci-	-						
fled violence 3	49.6	57.5	56. 8	53. 7	65. 5	56, €	
Accidental drowning	2.4	3.6	3. 8	2.9	5.0	3.5	
Automobile accidents.		14.6	12.8	9.3	6.5	10, 4	
War deaths	.2	.3	2.6	.2		1.3	
All other and ill-defined causes							
of deaths	229, 1	231. 1	225, 0	346, 8	368.9	345, 3	

¹ Includes "war deaths."

CONFERENCE OF HEALTH AUTHORITIES.

ANNUAL CONFERENCE OF STATE AND TERRITORIAL HEALTH AUTHORITIES WITH THE UNITED STATES PUBLIC HEALTH SERVICE TO BE HELD AT WASHINGTON, D. C., ON MAY 17 AND 18, 1922.

The Twentieth Annual Conference of State and Territorial Health Authorities with the United States Public Health Service will be held at Washington, D. C., on May 17 and 18, 1922.

It is expected that important State and National public health matters will be brought before the conference for action and the Surgeon General has urged that each State be represented by an official delegate and also that the chief sanitary engineers of the different States be present.

² Excludes "war deaths."

DEATHS DURING WEEK ENDED MAR. 4, 1922.

Summary of information received by telegraph from industrial insurance companies for week ended Mar. 4, 1922, and corresponding week, 1921. (From the Weekly Health Index, Mar. 7, 1922, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Mar. 4, 1922.	Corresponding week, 1921.
Policies in force	49, 109, 724	46, 146, 658
Number of death claims	12, 430	9, 560
Death claims per 1,000 policies in force, annual rate	13. 2	10.8

Deaths from all causes in certain large cities of the United States during the week ended Mar. 4, 1922, infant mortality, annual death rate, and comparison with corresponding week of 1921. (From the Weekly Health Index, Mar. 7, 1922, issued by the Bureau of the Census, Department of Commerce.)

	77.47	Week ended Mar. 4, 1922.		Annual death rate per	Deat 1	Infant mor- tality	
City.	Estimated population July 1, 1921. Total deaths. Peath deaths.		1,000, corre- sponding week, 1921.	Week ended Mar. 4, 1922.	Corresponding week, 1921.	rate, week	
Total	25, 680, 108	8, 505	17.3	14.3	1, 115	1,055	
Akron, Ohio	a 208, 435	39	9, 8	12,3	6	14	64
Albany, N. Y	115,071	40	18, 1	21.3	4	5	90
Atlanta, Ga	207, 473	68	17. 1	12.1	5	10	
Baltimore, Md	750, 864	244	16. 9	15.6	34	38	96
Birmingham, Ala	186, 133	44	12.3	16.0	3	12	
Boston, Mass	757, 634	322	22.2	14.9	51	30	136
Bridgeport, Conn	* 143, 555	42	15.3	11.1	9	7	112
Buffalo, N. Y	519,608	149	15.0	16, 2	29	34	114
Cambridge, Mass	110, 444	45	21, 2	13.7	4	6	73
Camden, N. J	119, 672	35	15.3	21.8	5	10	76
Chicago, Ill	2, 780, 655	855	16.0	13.7	129	. 120	******
Cleveland, Ohio	831, 138	225	14.1	12.6	43	34	111
Columbus, Ohio	245, 358	77	16.4	12.5	12 .	0	127
Dallas, Tex	165, 282	-, 86	13.6 17.0	12.6 16.1		8	******
Denver, Colo	263, 152 120, 668	87	37.6	18.1	10 20	7	279
Fall River, Mass	111, 423	21	9.8	10.1	1		213
Grand Rapids, Mich	141, 197	44	16, 2	10.7	3	4	50
Houston, Tex	144, 340	38	13.7	9.4	2	3	- 00
Indianapolis, Ind	325, 632	121	19.4	10.2	14	12	107
Jersey City, N. J	302, 788	94	16. 2	15.5	13	14	83
Kansas City, Kans	103, 884	44	22.1	10,0	7	3	162
Kansas City, Mo	336, 157	151	23, 4	11.9	21	14	
Los Angeles, Calif	614, 160	305	25.9	17.0	24	25	100
Louisville, Ky	236, 083	86	19.0	12.1	10	3	108
Lowell, Mass	113, 757	45	20.6	16.5	4	9	67
Memphis, Tenn	165, 656	76	23.9	13.5	11	2	******
Milwaukee, Wis	468, 386	111	12.4	11.8	19	16	93
Minneapolis, Minn	392, 815	95	12.6	12.6	13	18	71
Nashville, Tenn	122, 636	55	23.5	24.4	6	2	******
New Bedford, Mass	125, 012	50	20. 9 22. 2	15.4	17	12	25
New Haven, Conn	167,007	71	19.3	17.5	12	17	147
New Orleans, La New York, N. Y	394, 657	1,666	15. 1	14.7	233	240	90
Newark, N. J.	5,751,867 424,885	145	17.8	14.5	20	23	89
Norfolk, Va.	121, 260	34	14.6	13.8	4	3	71
Oakland, Calif	226, 472	91	21.0	10.4	6	4	76
Omaha, Nebr	197, 066	72	19. 1	16.1	7	14	75
Paterson, N. J.	137, 463	38	14. 4	14.0	6	4	92
Philadelphia, Pa	1, 866, 212	651	18. 2	17.2	89	87	105
Pittsburgh, Pa	602, 452	207	17.9	17.7	38	- 32	121
Portland, Oreg	264, 859	111	21.9	11.0	5	5	49
Providence, R. I	239, 645	126	27.4	14.6	11	10	87
Richmond, Va	175, 686	71	21.1	15.7	9	10	110
Richmond, Va	305, 229	85	14.5	14.7	7	16	54
St. Louis, Mo	786, 164	291	19.3	14.5	15	20	

Annual rate per 1,000 population.
 Deaths under 1 year per 1,000 births—based on deaths under 1 year for the week and estimated births for 1921. Cities left blank are not in the registration area for births.
 Enumerated population Jan. 1, 1920.

Deaths from all causes in certain large cities of the United States during the week ended Mar. 4, 1922, infant mortality, annual death rate, and comparison with corresponding week of 1921. (From the Weekly Health Index, Mar. 7, 1922, issued by the Bureau of the Census, Department of Commerce.)—Continued.

	Estimated	Week ended Mar. 4, 1922.		Annual death rate per	Deat 1	Infant mor- tality	
City.	population July 1, 1921.	Total deaths.	Death rate.	1,000, corre- sponding week, 1921.	Week ended Mar. 4, 1922.	Corresponding week, 1921.	rate, week ended Mar. 4, 1922.
St. Paul, Minn. Salt Lake City, Utah San Francisco, Calif.	237, 781 121, 595 520, 546	81 35 254	17. 8 15. 0 25. 4	12.5 17.2 13.5	9 1 15	8 13 4	8- 13- 8-
Seattle, Wash. Spokane, Wash. Springfield, Mass. Toledo, Ohio.	3 315, 312 104, 442 135, 877	85 40 35 65	14. 1 20. 0 13. 4 13. 4	9. 1 13. 0 12. 7 11. 1	4 4 7 6	5 2 2 7	34 85 104 56
Trenton, N. J. Washington, D. C. Wilmington, Del.	122,760 3 437,571 113,408	54 141 39	22. 9 16. 8 17. 9	11. 9 16. 2 15. 6	9 24 6	13 9	138 138 117
Worcester, Mass Yonkers, N. Y Youngstown, Ohio	103, 324	68 26 40	19. 2 13. 1 15. 0	11. 3 13. 6 12. 3	8 5 6	9 4 6	104 79

^{*} Enumerated population Jan. 1, 1920.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT STATE SUMMARIES.

Telegraphic Reports for Week Ended Mar. 11, 1922.

These reports are preliminary, and the figures are subject to change when later returns are received by the State health officers.

ALABAMA.	cases.	CALIFORNIA—continued.	ases.
Chicken pox.	45	Lethargic encephalitis:	ases.
Diphtheria	12	San Francisco.	1
Hookworm disease	55	Measles	22
Influenza:	-	Poliomyelitis:	
Barbour County	74	Pasadena	1
Montgomery County	62	Tehama County.	i
Scattering	49	Scarlet fever.	89
Malaria	3	Smallpox:	00
Ophthalmia neonatorum	1	San Jose	10
Pellagra	1	Santa Clara County	11
Pneumonia	6	Scattering	31
Scarlet fever.	10	Typhoid fever	5
Smallpox	32	-37	
Trachoma	1	COLORADO.	
Tuberculosis	14	(Explusive of Denver)	
Typhoid fever	2	(Exclusive of Denver.)	
-,,	_	Cerebrospinal meningitis	1
ARKANSAS.		Chicken pox	9
Chicken pox	28	Diphtheria	13
Diphtheria	11	Impetigo contagiosa	1
Influenza	409	Influenza	937
Malaria	23	Measles	26
Measles	4	Mumps	1
Pellagra	6	Pneumonia	41
Scarlet fever	8	Scarlet fever	47
Smallpox	7	Septic sore throat	1
Trachoma	1	Smallpox	7
Tuberculosis	7	Tuberculosis	19
Typhoid fever	1	Typhoid fever	4
W hooping cough	5	Whooping cough	1
CALIFORNIA.		CONNECTICUT.	
Cerebrospinal meningitis:		Cerebrospinal meningitis	4
San Francisco	1	Chicken pox	53
Diphtheria	143	Conjunctivitis (infectious)	2
Influenza:		Diphtheria:	
Berkeley	129	Bridgeport	11
Los Angeles	, 243	Hartford	12
Los Angeles County	292	Scattering	52
Oakland	32	German measles	3
Pasadena	79	Influenza:	
San Francisco	131	Fairfield County	19
Scattering	, 721	Hartford County	50

connecticut—continued.	Cases.	GEORGIA—continued.	cases.
Influenza—Continued.	ases.		
	164	Tetanus	1
Litchfield County	23	Tuberculosis (pulmonary)	3
Middlesex County		Typhoid fever	6
New Haven County		Whooping cough	17
New London County	177		
Tolland County	6	ILLINOIS.	
Windham County	1	Cerebrospinal meningitis:	
Lethargic encephalitis	2	Chicago	5
Measles:		Rockford	1
Groton	- 8		•
Hartford	69	Diphtheria:	
New Haven	29	Chicago	157
Stamford	27	Scattering	109
	40	Influenza:	
Scattering	28	Chicago:	251
Mumps		Scattering	484
Ophthalmia neonatorum	1	Lethargic encephalitis:	
Pneumonia (lobar)	105	Chicago	1
Scarlet fever:		Olney	1
Bridgeport	15	Pneumonia:	-
New Canaan	9		504
New Haven	10	Chicago	
Waterbury	16	Scattering	215
•	36	Poliomyelitis:	
Scattering	30	Chicago	1
Smallpox:	10	Lincoln	1
Bridgeport	10	Scott County—Bluffs Precinct	1
Scattering	13	Whiteside County-Fenton Township	1
Tetanus	1	Scarlet fever:	
Tuberculosis (all forms)	31	Chicago	120
Typhoid fever	3	Sheffield	10
Whooping cough	19	Scattering	144
7 0 - 0			***
DELAWARE.		Smallpox:	14
Chicken pox	3	Peoria	14
	3	Scattering	44
Diphtheria	2	Typhoid fever	12
Influenza		Whooping cough	112
Measles	3		
Mumps	1	INDIANA.	
Pneumonia	1	Cerebrospinal meningitis:	
Scarlet fever:		White County	1
Wilmington	63		71
Scattering	15	Diphtheria	41
Tuberculosis	4	Rabies in animal:	
		Floyd County	1
FLORIDA.		Scarlet fever	92
		Smallpox	25
Cerebrospinal meningitis	1	Typhoid fever	7
Diphtheria	14		
Influenza	72	IOWA.	
Malaria	4	Diphtheria	26
Pneumonia	5	Scarlet fever	70
Smallpox	10	Smallpox	52
Typhoid fever	12		
		KANSAS.	
GEORGIA.		Cerebrospinal meningitis	3
Chicken pox	29	Chicken pox	. 77
Diphtheria	29	Diphtheria	66
Hookworm disease	5	Influenza	557
		Measles	8
Influenza	149		
Malaria	10	Mumps	13
Measles	8	Pneumonia	112
Mumps	2	Scarlet fever	96
Paratyphoid fever	1	Smallpox	40
Pneumonia	13	Tetanus	1
Scarlet fever	7	Tuberculosis	30
Septic sore throat	1	Typhoid fever	2
Smallpox	16	Whooping cough	12
	-		

LOUISIANA.	Cases.	MINNESOTA—continued.	ases.
			172
Cerebrospinal meningitis	1	Scarlet fever	41
Diphtheria		Smallpox	92
Influenza		Tuberculosis	
Poliomyelitis	1	Typhoid fever	3
Smallpox		Whooping cough	0
Typhoid fever	8	MISSISSIPPI.	
MAINE.		Cerebrospinal meningitis	1
Cerebrospinal meningitis	1	Diphtheria	7
Chicken pox	24	Scarlet fever	14
Diphtheria	15	Smallpox	26
Influenza	352	Typhoid fever	6
Measles	46	MISSOURI.	
Pneumonia	35		
Scarlet fever	52	Cerebrospinal meningitis	1
Smallpox	2	Chicken pox	30
Tuberculosis	10	Diphtheria	64
Whooping cough	2	Epidemic sore throat	20
		Influenza	279
MARYLAND,1		Measles	2
Chicken pox	81	Mumps	8
Diphtheria	44	Pneumonia	101
German measles	11	Scarlet fever	44
Influenza	814	Smallpox	23
Lethargic encephalitis	4	Trachoma	51
Measles	210	Tuberculosis	40
Mumps	145	Typhoid fever	5
Ophthalmia neonatorum	2	Whooping cough	1
Pneumonia (all forms)	249	MONTANA.	
Scarlet fever	117		
Septic sore throat	4	Diphtheria	12
Trachoma	1	Influenza	263
Tuberc ilosis	52	Scarlet fever	29
Typhoid fever	3	Smallpox	17
Vincent's angina	1	NEBRASKA.	
Whoopin cough	23	Chicken pox	22
MASSACHUSETTS.		Diphtheria	24
Cerebrospinal meningitis	1 3	Influenza	119
Chicken pox	115	Measles:	
Conjunctivitis (suppurative)	13	Fremont	20
Diphtheria	147	Grand Island	11
German measles	19	Hastings	23
Influenza	521	Lincoln	23
Lethargic encephalitis	7	Omaha	22
Malaria	2	Scattering	19
Measles	590	Mumps	26
Mumps	140	Pneumonia	7
Ophthalmia neonatorum	23	Scarlet fever:	
Pellagra	1	Cedar County	19
Pneumonia (lobar)	284	Franklin County	10
Poliomyelitis	1	Grand Island	12
Scarlet fever	249	Hartington	29
Septic sore throat	6	Scattering	57
Trachoma	3	Septic sore throat	1
Tuberculosis	162	Smallpox:	
Typhoid fever	5	York County	8
Whooping cough	112	Scattering	28
		Tuberculosis	1
MINNESOTA.		Typhoid fever	2
Chicken pox	9	NEW JERSEY.	
Diphtheria	5%		400
Influenza	209	Chieken pox	123
Measles	44	Diphtheria	124
Pneumonia	5	Influenza	221

1 Week ended Friday.

NEW JERSEY-continued.		SOUTH DAKOTA.	
	Cases.	Coola Danota:	Cases.
Measles		Chicken pox	4
Paratyphoid fever		Diphtheria	13
Pneumonia		Influenza	11
Scarlet fever		Measles	4
Smallpox		Pneumonia	17
Trichinosis		Scarlet fever	23
Typhoid fever		Smallpox	30
Whooping cough	97	Trachoma	1
NEW MEXICO.		Tuberculosis	2
ALD W PARAGOT	4	Whooping cough	1
Chicken pox		TEXAS.	
Diphtheria		Diphtheria	31
Influenza		Influenza	1, 181
Measles		Measles	63
Mumps		Pneumonia	157
Pneumonia	.27	Smallpox	94
Scarlet fever:	10	Typhoid fever	6
Albuquerque		VERMONT.	
Scattering	3 2	The state of the s	
Smallpox		Chicken pox	34
Whooping cough	23	Diphtheria	3
NEW YORK.		Influenza	15
		Measles	
(Exclusive of New York City.)		Mumps	
Diphtheria	151	Pneumonia	13
Influenza	1,973	Scarlet fever	39
Lethargic encephalitis	1	Typhoid fever	1 15
Measles	294	Whooping cough	15
Pneumonia	662	VIRGINIA.	
Scarlet fever	330	Smallpox:	-
Smallpox	1	Bedford County	2
Typhoid fever	14	WASHINGTON.	
Whooping cough	148	Chicken pox	46
		Diphtheria	14
NORTH CAROLINA.		German measles	2
Cerebrospinal meningitis	1 1	Influenza	81
Chicken pox	167	Measles	3
Diphtheria	43	Mumps	87
German measles	2	Pneumonia	11
Measles	19	Scarlet fever	32
Scarlet fever	27	Smallpox:	
Septic sore throat	6	Spokane	11
Smallpox	96	Tacoma	17
Typhoid fever	5	Scattering	28
Whooping cough	127	Tuberculosis	63
		Typhoid fever	5
OREGON.		Whooping cough	20
Chicken pox	12	WEST VIRGINIA.	
Diphtheria	13		
Influenza	250	Diphtheria	8
Measles	1	Influenza:	100
Mumps	7	Harrison County	128 50
Pneumonia	1 23	Scarlet fever	-
Scarlet fever	15	Typhoid fever	8
Smallpox:		Typnout level	•
Multnomah County	8	WISCONSIN.	
Portland	20	Milwaukee:	
Scattering	5	Cerebrospinal meningitis	3
Tuberculosis	12	Chicken pox	45
Typhoid fever	2	Diphtheria	14
Whooping cough	2	German measles	4
¹ Deaths.			

wisconsin-continued.		Wisconsin—continued.			
Milwaukee-Continued.	Cases.	Scattering-Continued.	cases.		
Measles	. 2	Diphtheria	72		
Pneumonia	. 21	German measles	10		
Scarlet fever	. 10	Influenza	321		
Smallpox	. 4	Measles			
Tuberculosis	. 15	Pneumonia			
Typhoid fever	. 2	Scarletfever	106		
Whooping cough	. 39	Smallpox	43		
Scattering:		Tuberculosis	26		
Cerebrospinal meningitis	. 3	Typhoid fever	3		
Chicken pox	. 91	Whooping cough	27		

Delayed Reports for Week Ended Mar. 4, 1922.

DISTRICT OF COLUMBIA.		KENTUCKY-continued.	
C	ases.		ases.
Chicken pox	43	Influenza—Continued.	
Diphtheria	17	Lyon County	45
Influenza	9	Madison County	129
Measles	8	Pendleton County	90
Scarletfever	11	Rowan County	34
Smallpox	2	Scott County	40
Tuberculosis	32	Todd County	53
Typhoid fever	2	Woodford County	52
Whooping cough	2	Scattering	92
		Malaria	1
KENTUCKY.		Measles:	
Cerebrospinal meningitis-Scott County	1	Franklin County	30
Chicken pox	17	Fulton County	35
Diphtheria:		Jefferson County	52
Jefferson County	11	Scattering	7
Scattering	17	Mumps	5
Influenza:		Pneumonia	119
Allen County	34	Scarlet fever:	
Ballard County	73	Henry County	9
Butler County	16	Scattering	15
Caldwell County	25	Septic sore throat	1
Christian County	58	Smallpox	5
Franklin County	.97	Tonsillitis	1
Graves County	20	Trachoma	1
Henry County	82	Tuberculosis	54
Jefferson County	35	Typhoid fever	1
Logan County	113	Whooping cough	5

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week.

State.	Cerebrospinal miningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Pellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
Arizona (January, 1922) Florida (February, 1922) Hawaii (January, 1922) Massachusetts (February, 1922) New Mexico (December, 1921)	2 8	16 83 22 790 135	291 19 5, 222	18	2 31 19 2,062 8	2	1 4 1	26 17 7 951 42	36 36 	8 50 23 31 33

CITY REPORTS FOR WEEK ENDED FEB. 25, 1922. ANTHRAX.

City.	Cases.	Deaths.
New York: New York Pennsylvania: Philadelphia	1	
BERIBERI.		
California: San Francisco.	1	1

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre-		ended 25, 1922.	City.	Median Feb.		ended 5, 1922.
	Vious	Vious			years.	Cases.	Deaths,
California: San Francisco Connecticut:	1	1	: 1:12	New Jersey: Garfield	0	1	
Bridgeport	0	3		Auburn	0	1	
New Haven Illinois:	0	3	1	New York North Carolina:	7	6	8
Peoria Maryland:	0		1	Rocky Mount Pennsylvania:	0		1
Baltimore	0	1		Philadelphia Tennessee:	3	3	1
Arlington	0	1	1	Knoxville		1	
Leominster	0	1		West Virginia:		-	
Michigan:		,	4 4	Huntington	0		1
Alpena Detroit	0	î		Eau Claire	0	1	

DIPHTHERIA.

See p. 664; also Telegraphic weekly reports from States, p. 651, and Monthly summaries by States, p. 655.

INFLUENZA.

	Ca	ses.	Deaths.		Cases.		Deaths,
City.	Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	week ended Feb. 25,	City.	Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	week ended Feb. 25,
Alabama: Birmingham Arkansas: Fort Smith Little Rock North Little Rock California.		3 2 39 3	3	California—Continued. Riverside Sacramento. San Diego. San Francisco. Santa Ana. Santa Barbara	11 2 22	23 88 236 987 161 13	3 3 51
AlamedaBakersfieldBerkelev		671	i	Santa Barbara Santa Cruz Vallejo		96 50	1
Eureka. Long Beach		38 57	i	Pueblo			1
Los Angeles Oakland Pasadena		3,651 242 308	4	Bridgeport		58 8	5

INFLUENZA-Continued.

6	Cas	ses.	Deaths,		Ca	ses.	Deat
City.	Week ended Feb. 26 1921.	Week ended Feb. 25, 1922.	week ended Feb. 25, 1922.	City.	Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	ende Feb.
Connecticut—Continued.				Massachusetts-Contd.			
Hartford Manchester Meriden		33	1	Haverhill	1	63	
Manchester	1	48	*******	Holyoke Lawrence	******	3	*****
Milford		2	1			Ā	
Milford New Britain New Haven Norwich	11			Lowell		44	
New Haven		9	13	Lynn	1	12	
Norwich		4	*******	Malden	******	5	
Stomington		25	*******	Meirose	******	3 5	
Waterbury		'	********	Maiden Melrose Newton Peabody Quincy Saugus. Somerville. Southbridge. Springfield Wakefield	*******	i	*****
District of Columbia: Washington	1	7	4	Quincy		8	
Florida:				Saugus		41	
Tampa		7		Somerville	******	33 19	
Georgia: Atlanta Favannah	4	14	4	Springfield	*******	3	
Savannah	,	3	3			1	
Valdosta			1	Waltham Webster		11	
Illinois:				Webster		1	
Aurora		2 3	1	Westfield		1	
Aurora. Champaign. Chicago.	12	707	22	Woburn Worcester	9	73	
Cicero	13	14		361-1-1	-	10	*****
Decatur. East St. Louis. Freeport. La Salle. Oak Park. Rock Island. Springfield		7		DetroitFlint	3	100	
East St. Louis		30	3	Flint		2	
Freeport		1		Kalamazoo Pontiac		2	
Ook Pork		10	*******	Minnesota:		1	*****
Rock Island		4		Duluth		9	
Springfield		4 2	1	Minneapolis		6	
Indiana:				St. Paul	4	4	
Indianapolis			10	Missouri:	-		
Indiana: Indianapolis. Kokomo La Fayette Lozansport Mishawaka Terre Haute	******	19	4	Kansas City St. Joseph	7	21	
Lozansport	*******	14	2	St. Louis	1	49	
Mishawaka			ī	Montana:		-	
Terre Haute			1	Great Falls		3	
Kansas:				Missoula	2	166	
Kansas: Coffeyville Kansas City Lawrence Salina Wichita	2			Nevada: Reno		26	
Lawrence		11			*******	20	
Salina		2		New Hampshire: Manchester		3	
Wichita		17	1				
Kentucky:		65		Asbury Park		1 2	
LouisvilleOwensboro	1	10	1	Bayonne	9	. 2	*****
onisiana.		10	*******	Bavonne Belleville Bloomfield East Orange		4	
Baton Rouge New Orleans	2			East Orange		4	
New Orleans		72	6	Garfield		13	
Maine: Auburn		2		Garneid Harrison Jersey City Kearny Montclair Morristown	1	6	
Bath	*******	2	******	Kearny	1	36	
Bath. Biddeford. Lewiston		9	·····i	Montclair		15	
Lewiston			1	Morristown		4	
Portland		12		Newark Orange			
faryland:		32	*******	Passaia	····i	48	*****
Baltimore	152	234	4	Passaic. Paterson		45	
Baltimore. Cumberland	2	22		Plainneld	2		
tassachusetts:				Trenton. West Hoboken	1	20	
Arlington		6	*******	West Hoboken			
Attleboro		27		West Orange New Mexico:		20	
Beverly	*******		1	New Mexico: Albuquerque New York:		115	
Boston	3	353	10	New York:			
Braintree		26		New York: Albany	1	138	
Bewerly Boston Braintree Brookline Cambridge Chelsea		7		Albany		1 20	
Chelsea	1	122	1	Buffelo	1	20 10	
Clinton		3	1	Hornell	*******	2	
		2		Ithaca		2 5	
Easthampton							
Clinton Easthampton Everett. Fall River	1	96 61		Jamestown	1	43	

INFLUENZA-Continued.

	Ca	303.	Deaths.		Ca	ses. '	Deaths,
City.	Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	week ended Feb. 25,	City.	Week ended Feb. 26, 1921.	Week ended Feb. 25, 1922.	week ended Feb. 25
New York—Continued. New York Niagara Falls		1,312	105	Rhode Island: Providence South Carolina:		59	
Peekskill		67		Charleston Tennessee: Memphis		4	
Saratoga Springs Schenectady	1	11 24		Texas: Austin Beaumont		3	
White Plains Yonkers North Carolina:			, i	Port Worth	6	27 1	
Durham Raleigh Winston-Salem			1 2	Utah: Salt Lake City Virginia:		8	
North Dakota: Grand Forks		16	.:	Danville Norfolk		14 93	
Ohio: Akron Ashtabula		11		Petersburg Richmond Roanoke		18 25	
Barberton Cambridge Cincinnati		1 4 21	1 27	Washington: Walla Walla		12	
Cleveland Columbus.	6	141	8 2	West Virginia: Bluefield Charleston		i	1
Dayton. East Cleveland Hamilton		4	·····i	Clarksburg Fairmont Huntington	2	9 31	
Newark Toledo Oklahoma:	*******	77	3	Wisconsin: Fond du Lac		5	
Muskogee Oklahoma	2	••••••	·····i	Kenosha		1 5	
Oregon: Portland		19	15	Wyoming: Casper		20	1
Philadelphia	9	77	21	Cheyenne		4	

LETHARGIC ENCEPHALITIS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California: San Francisco Connecticut: Meriden Kansas: Topeka.	1	1	Massachusetts: Framingham Nebraska: Omaha Wisconsin: Milwaukee	1 3	1

MALARIA.

Alabama: Tuscaloosa Arkansas: Little Rock California: Los Angeles	3	fassachusetts; Westfieldexas; Dallas	1
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MEASLES.

See p. 664; also Telegraphic weekly reports from States, p. 651, and Monthly summaries by States, p. 655.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama: Anniston Mobile. Georgia: Atlanta	1	1 2	South Carolina: Charleston		2

PNEUMONIA (ALL FORMS).

		Rhode Island:			Alabama:
		Rock Island	11		Birmingham
	4	Springfield	3		Montgomery
1		Indiana:			Arizona:
		East Chicago	2		Tucson
		Evansville	4		r kansas:
		Fort Wayne			Fort Smith
	1	Con a la fort			alifornia:
		Gary	2		Alameda
		Hammond	2 2 2 2		Bakersfield
		HuntingtonIndianapolis	2	6	Berkeley
		Indianapolis	2		Long Beach
		Muncie	50	107	Los Angeles
		Newcastle	8		Oakland
		Terre Haute	4		Pasadena
1		Iowa:	5		Sacramento
3	3	Burlington	1		San Bernardino
	1	Muscatine	5	6	San Diego
-		Kansas:	28		San Francisco
1	1	Atchison	2		Santa Ana
5	5	Coffeyville			Santa Barbara
		Fort Scott			Santa Cruz
2	2	Hutchinson	1		Vallejo
7	27	Kansas City	-		olorado:
		Lawrence	20		Denver
		Parsons	1		Pueblo
	11	Topeka	- 1		
)	10	Wichita	14		onnecticut:
		Kentucky:	12	3	Bridgeport
		Covington	71		Bristol
	1	wensboro	3	9	Derby
		Louisiana:	9	2	Hartford
5	15	New Crleans	*******		Manchester
1		Maine:			Milford
		Auburn	17		New Haven
3	3	Bangor	1 2		New London
- 1		Biddeford		********	Norwalk
-		Lewiston	11	12	Waterbury
6	6	Portland			Delaware:
	1	Sanford	8		Wilmington
- 1		Maryland:	1		istrict of Columbia:
7]	87	Baltimore	22		Washington
1	57.	Cumberland			
		Massachusetts:	12		eorgia:
21	2	Arlington	14		Atlanta
-		Belmont	*******	2	Augusta
		Beverly.		9	Macon
		Boston	3		Rome
1		Braintree	0		Savannah
2		Brookline	2		daho:
i	11	Cambridge	- 1	*******	Pocatello
		Chelsea.	1	3	llinois:
			1		Alton
	5	Clinton Everett	2	. 4	Aurora
			72	********	Bloomington
١,		Fall River		418	Cnicago
-	1	Framingham	3 2	9	Cicero
	4	Gardner	2	*********	Decatur
	5	Haverhill	2	15	East St. Louis
		Holyoke	********	7	Evanston
2	~	Lawrence	1	********	Freeport
		Leominster	3	********	Galesburg
		Lowell	3		Jacksonville
	5	Lynn	1		Kewanee
1	4	Malden	3		La Salle
-		Medford	1	6	Mattoon
5	3	Melrose	2	5	Oak Park
-		Methuen	4		Peoria
_1		New Bedford	1 11		Quincy

PNEUMONIA (ALL FORMS)-Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Massachusetts-Contd.			New York-Continued.		
		2	Geneva		
Newton North Adams		2	Hudson	2	
Peabody	2		Ithaca	2	
Peabody Pittsfield		i	Jamestown	10	
Plymouth		1	Lackawanna Little Falls		1
Quincy	9	4	Lattile Falls	1	
Saugus. Somerville		6	Lockport. Middletown. Mount Vernon. New York. Niagara Falls.		
Springfield	7	4	Mount Vernon	20	
Taunton	•	5	New York	987	44
Taunton Wakefield	2		Niagara Falls	10	
Watertown	2	i			
Westfield	4	2	Olean		
Woburn		2	Peekskill	3	
Worcester	19	15	Port ChesterPoughkeepsie	6	1
Michigan:			Rochester	48	1
Ann Arbor Battle Creek	3	********	Pome	40	
Battle Creek	017		Rome	3	1
Detroit	217	65	Saratoga Springs Schenectady	10	9
Flint	5	3 2	Troy	6	i
Grand Rapids	3	.2	Watertown	2	1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 3 2 3 3 3 5 5 6 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7 5 7
Kalamazoo	1		Wateryliet		1
Pontiac Port Huron	2	·····i	Watervliet White Plains	11	1
Minnesota:	-		Yonkers North Carolina:	13	8
Duluth	5	:4	North Carolina:		
Minneapolis		7	Charlotte		4
Rochester	1		Durham		1
St. Paul		4	Raleigh		1 1 2 2 2 5
Microspie			Salisbury Wilmington Winston-Salem		2
Kansas City	75	43	Wilmington	4	2
St. Joseph Springfield		12	Winston-Salem		
Springfield		1	Ohio:		
Montana:			Akron	16	
BillingsGreat Falls		1	Alliance		2
Great Falls	3	2	Astabula	********	1 2 1 3 6 27 52
Missoula		1	Barberton		3
Nebraska:			Cambridge		6
Lincoln		17	Canton		27
Omaha		37	Cleveland	87	52
Nevada:			Columbus	0.	9
Reno	•	********	Dayton	2	
		1	Dayton East Cleveland	ī	
Berlin		3	Elvria		1
New Jersey			Hamilton	5	3
Asbury Park	2		Kenmore	1	
Atlantic City		5	Lancaster		·····i
Bayonne	6		Lorain		î
BayonneBloomfield	2		Mansfield	2	
Curton	4	3	Middletown		1
East Orange	9	2	Newark		9
Elizabeth		10	Norwood		í
Englewood		1	Sandusky Springfield		1 2 2 1 3 3 8
Garfield. Hackensack	9	6	Toledo	*********	3
Hoboken	9	7	Youngstown		8
Hoboken	11		Zanesville	5	3
Jersey City	7	2	Oklahoma:	,	
Montelair	4		Oklahoma		15
Morristown		3	Oregon:		
	12	3	Oregon: Portland		12
Orange			Pennsylvania:		
Orange		2 1	*** * 1 1 1 1 1	173	141
Passaic	10	2	Philadelphia	110	
Passaic	10 28	4	Philadelphia Rholde Island	110	_
Passaic	10 28	4	Dhalda Island		3
Passaic. Paterson. Perth Amboy. Phillipsburg.	10 28		Rholde Island Cranston Pawtucket		8
Passaic	10 28 5 1	1	Rholde Island Cranston Pawtucket Providence		8
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton	10 28 5 1 15	4	Rholde Island Cranston Pawtucket Providence South Carolina:		8 25
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton	10 28 5 1	i i i i i i i i i i i i i i i i i i i	Rholde Island Cranston Pawtucket Providence South Carolina: Charleston		8 25
Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton	10 28 5 1 15	io 4	Rholde Island Cranston. Pawtucket. Providence. South Carolina: Charleston. Tennessee:		25
Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton	10 28 5 1 15 1	10 10	Rholde Island Cranston Pawtucket Providence. South Carolina: Charleston Tennessee: Memphis		25
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton Union West Hoboken West New York West Orange	10 28 5 1 15	io 4	Rholde Island Cranston Pawtucket Providence South Carolina: Charleston Tennessee: Memphis Texas:		25 20
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton Union West Hoboken West New York West Orange New Mexico:	10 28 5 1 15 1	10 10	Rholde Island Cranston Pawtucket Providence. South Carolina: Charleston Tennessee: Memphis Texas: Austin.		25 2 20
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton Union West Hoboken West Orange New Mexico: Albuquerque	10 28 5 1 15 1	10 10	Rholde Island Cranston Pawtucket Providence. South Carolina: Charleston Tennessee: Memphis Texas: Austin.		25 20
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton Union West Hoboken West New York West Orange New Mexico: Albuquerque New York:	10 28 5 1 15 1 19 3	10 10	Rholde Island Cranston Pawtucket. Providence. South Carolina: Charleston. Tennessee: Memphis. Texas: Austin Beaumont. Corpus Christi.		25 20
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton Union West Hoboken West Hoboken West Orange New Mexico: Albuquerque New York: New York: Albany	10 28 5 1 15 1 9 3	10 10	Rholde Island Cranston Pawtucket Providence South Carolina: Charleston Tennessee: Memphis Texas: Austin Beaumont Corpus Christi Deallas		25 20
Orange Passaic Paterson Perth Amboy Phillipsburg Plainfield Summit Trenton Union West Hoboken West New York West Orange New Mexico: Albuquerque New York:	10 28 5 1 15 1 19 3	10 10	Rholde Island Cranston Pawtucket. Providence. South Carolina: Charleston. Tennessee: Memphis. Texas: Austin Beaumont. Corpus Christi.		3 8 25 20 7 3 1 12 8 2 5

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Utah: Salt Lake City. Vermont: Rutland. Virginia: Alexandria Lynchburg. Norfolk. Petersburg Portsmouth Richmond. Roanoke. West Virginia: Charleston. Clarksburg.	2	11	West Virginia—Contd. Huntington Parkersburg. Wheeling. Wisconsin: Fond du Lac Janesville. Kenosha. Milwaukee. Wyoming: Casper. Cheyenne.	1 8 2	2

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City for p	Median for pre-	Week ended Feb. 25, 1922.		City.	Median for pre- vious	Week ended Feb. 25, 1922.	
	years.	Cases.	Deaths.		years.	Cases.	Deaths
Connecticut: New HavenGeorgia:	0	1		New Jersey: Garfield New York:			3
AugustaIllinois: Centralia Maryland:		1		New York Ohio: Hamilton Pennsylvania:	0	3	
Baltimore Cumberland Massachusetts:	0	2	·····i	Nerristown Philadelphia Rhode Island:	0	1 2	
Worcester	0	2		Providence	-0	1	1

RABIES IN ANIMALS.

City.	Cases.	City.~	Cases,
Georgia: Savannah	1 2 1	New Jersey: Morristown. Plainfield. Virginia: Petersburg.	

SCARLET FEVER.

See p. 664; also Telegraphic weekly reports from States, p. 651, and Monthly summaries by States, p. 655.

88908°-22-4

2

SMALLPOX.

The column headed "Median for previous year:" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	years.	-	cek ended 5. 25, 1922.		for pre-		Week ended Feb. 25, 1922.	
		Cases.	Deaths.		vious years.	Cases.	Deaths	
				Nebraska:				
Birmingham	6	2	i	Omaha	15	1		
MobileCalifornia:	1	8	1	North Dakota: Grand Forks	5	1		
Bakersfield	0	2		Ohio:				
Berkeley	0	3		Cincinnati	1	2		
Long Beach		1		Dayton	0	3		
Los Angeles		i		Findlay	0	1		
Oakland		î		Fremont	0	3		
San Francisco		6		Hamilton	2	1		
Colorado:	0	0		New Philadelphia		12		
		7	. 5	Springfield	0	10		
Denver	11		. 0	Toledo	1	- 6		
Connecticut: Bridgeport	0	10		Oklahoma:		. 0		
Fairfield		2		Oklahoma	2	2		
District of Columbia:				Oregon:		26		
Washington	0	3		Portland	5	26	******	
Georgia:	-			Pennsylvania:	0			
Macon	3	2		Harrisburg		1		
Illinois:	1	-		Jeannette	0	1		
Chicago	5	3	2	Meadville	0	3	******	
Peoria	1	21		Philadelphia	0	- 1		
Indiana:				South Dakota:	- 1			
Bloomington	0	3		_ Sioux Falls	1	1	******	
Indianapolis	6	1	******	Tennessee:				
lowa:				Memphis	1	1		
Burlington	0	8		Texas:		_	1	
Clinton	0	1		Dallas	25	5		
Council Bluffs	1 1	1		Fort Worth	0	3	. 1	
Muscatine	0	3		Houston	0	1		
Sioux City	5	1		Utah:				
Kansas:				Salt Lake City	10	3		
Hutchinson	2	2		Virginia:			-	
Kansas City	1	3		Danville	0	1		
Topeka	1	1		Washington:				
Wichita	4	4		Aberdeen	1	2		
Kentucky:				Bellingham	1	1		
Louisville	1	3		Spokane	27	11		
dichigan:				Tacoma	0	5		
Ann Arbor	(1		Yakima	5	1		
Detroit	- 7	4		West Virginia:	1			
Flint	2	1		Bluefield	3	1		
finnesota:				Wisconsin:				
Duluth	2	1		Kenosha	0	2		
Hibbing	0	1		Manitowo:	0	2		
Minneapolis	35	13		Marinette	0	1		
Rochester	4	6		Milwaukee	3	6		
St. Paul	7	14		Racine	0	ĭ		
(issouri:	.			Superior	0	5		
Kansas City	2	4	4	Waukesha		2		
St. Louis	6	i	- "	Wausau	0	2	******	
fontana:	0	1	******	West Allis		ĩ		
Great Falls	1	8		TOST MAILS				

TETANUS.

City.	Cases.	Deaths.
Illinois: Chicago Pennsylvania: Phitadelphia	1	1

TUBERCULOSIS.

See p. 664; also Telegraphic weekly reports from States, p. 651.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding weeks of the years 1915 to 1921, inclusive. In instances in which data for the full seven years are incomplete, the median is that for the number of years for which information is available.

City.	Me- dian for pre-	Feb.	k ended 25, 1922.	City.	Me- dian for pre-	Feb. 2	ended 5, 1922.
	vious years.	Cases.	Deaths.		vious years.	Cases.	Deaths.
Alabama:		1	inea.	Minnesota:			
Birmingham	1	. 1		Minneapolis	2	1	1.
Mobile		i i		St. Paul	ő		1
Arkansas:	. 0			Virginia	0	1	
Little Rock	0	1	1	Missouri:	U	1	
California:	U			St. Louis	2	3	
Oakland	. 0	3	1	New Jersey:	2	0	
Colorado:	. 0	3		Atlantic City		1	
Denver			10 1	New York:	1	1.	
		1	******				-
Delaware:		-		Binghamton	0	1	
Wilmington	0	2		Buffalo	0	2	1
District of Columbia:	-	-	1	New York	8		1
Washington	0	1		Rochester	1	1	
Florida:	-	112		Troy	0	1	
Tampa		6		Watertown	0	2	
Georgia:				Ohio:			1
Atlanta	0		1	Cincinnati	0	1	
Macon	0	2		Cleveland	2	1	
Rome	0	1		Fremont	0	2	
Illinois:		1 4 1 1		Oregon:		1	
Chicago	3	1		Portland	. 0	1	
Indiana:				Pennsylvania:			
Hammond	0		1	Connellsville	0	1	
Indianapolis	0	1	1	Norristown	0	1	
Logansport	0	1		Philadelphia	7	1	
Kansas:	-	_		Pittston	0	1	
Kansas City	0	1		Tennessee:		-	
Kentucky:		-		Memphis	0	1	
Louisville	0		1	Texas:		-	
Louisiana:			1 . 1	Austin	. 0		. 1
New Orleans	0	1		Galveston	0	4	
Maryland:				Houston	. 0		1
Baltimore	5	1	1	Virginia:			
Massachusetts:		•		Petersburg	0	1	
Boston	3	2		Washington;	- 0		
Northampton	0			Seattle	0		
Michigan:	0	3.6		Tacoma	0	i	******
Battle Creek	0	1		Wisconsin:	0		
Detroit	3	1		Marinette	0	1	
Flint	0	1	i	Milwaukee	1	1	******
Filit	0	1	1	Oshkosh			
		111		USHKUSH	0	1	

TYPHUS FEVER.

City.	Cases.	Deaths.
Colorado: Pueblo.	. 1	

	Population	Total deaths	Diph	theria	Me	asles.	Ser	arlet ver.	Tu cul	ber- osis.
City.	Jan. 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:						-	-			
Anniston	17, 734	50	i		i				3	2
Birmingham	178, 270 60, 151 43, 464 11, 996	50 22 12	1	1	1		1			2
MontgomeryTuscaloosa	43, 464	12	2							1
Tuscaloosa	11, 996		1							
Tueson	20, 292	14		1						8
Arkansas:				1					1	
Fort Smith	28, 811 64, 997	13	1			*****				1
Little Rock North Little Rock	14,048		1				1			
California:			1	210				-	1	
Alameda	28, 806	10		1	1		12			
Bakersfield	18, 638 55, 886	11	9	1	1	******	5			
Eureka	12, 923 55, 593	18	7							
Eureka. Long Beach.	55, 593	21	8				3 29		1	1
Los Angeles	576, 673 216, 361	263 69	32	2	1		9		79	28
Pasadena.	45, 354	13	1				1		3	
Pasadena Richmond	45, 354 16, 843	2	1							
Riverside	19, 341	8 31	····i		1		7		1	2
San Bernardino	65, 857 18, 721 74, 683	8								2
San Diego	74, 683	29	2				6		2	
San Francisco	508, 410	260	39	1	3		15		33	21
Santa Ana Santa Barbara Santa Cruz	15, 485 19, 441 10, 917	6								
Santa Cruz	10, 917	7					1			
Vallejo	21, 107	6								*****
Colorado: Denver	256, 369	106	8		1		5			13
Greeley	256, 369 10, 883 42, 908	. 0								
Pueblo	42, 908	9	7	. 2						1
Connecticut:	143, 538	51	11	1	7	1	12	1		4
BridgeportBristol	20, 620	10	i				1		1	
Derby	11 238	2								
Fairfield (town)	11, 475 22, 123 138, 036	1	1-		1 3		3		····i	*****
Hartford	138, 036	51	7	******	50		4		8	1
Manchester (town)	18, 370	7					1			
Meridan (city)	29, 842	4	2	·	i	******	2 2		1	*****
Milford (town)	10, 193 162, 519	71	2		21	1	14		8	3
New London	25 688	7	1		4				1	
Norwalk	27, 700	15			3		····i		*****	*****
Norwich (city) Stonington (town)	27, 700 22, 304 10, 236	2	4	*****	0	******			*****	
Waterbury	91, 410	30	5				12	1	4	1
Delaware:		37	2		4		50			2
Wilmington. District of Columbia:	110, 168	91	2				30			-
Washington	437, 571	148	18	3	10		12		33	7
Florida:	F1 0F0	10	3						2	2
Tampa Georgia:	51, 252	13	3						-	-
Albany	11, 555		1							
Atlanta	200, 616	73	4				5		4	9
AugustaBrunswick	52, 548 14, 413	0	1	*****				*****		******
Macon	52, 995				15		4			
Rome	13, 252		5							
Savannah Valdosta	83, 252 10, 783	38	····i		*****		4	1	******	9
ValdostaIdaho:	10, 783		*	*****						1
Pocatello	15, 001	7		1						
Illinois:	24, 682	4	2						1	
Alton	36, 397	9	1		21				1	1
Bloomington	28, 725	11					2			
Blue Island	11, 424 12, 491	6	2						*****	
Centralia	12, 491	5	1							

	Population	Total deaths	Diph	theria.	Mea	sles.		rlet rer.		ber- osis.
City.	Jan. 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Çases.	Deaths.
Illinois—Continued.									-	
Champaign	15, 873 2, 701, 705 19, 653				1	****	1		******	
Chicago	2,701,705	731	156	16	238	4	127	2	198	42
Chicago Heights	19, 653	6								
Chicago Heights	44, 995	14	4		4		3			1
Decatur. East St. Louis	43, 818 68, 740	11	1				1		*****	2
East St. Louis	68, 740	11		*****	*****	*****		*****	2	i
Elgin	27, 454 37, 215	7		*****				*****	*****	
	37, 215	10	1	*****	1	*****	î	*****	*****	····i
Kraonort	19, 669	8 7	i	****					1	
Galesburg. Jacksonville. Kewanee.	23, 834	1 7					3		1	******
Jacksonville	15, 713 16, 026	15	4	*****	*****		3	*****		
Kewanee	10, 020	5	1	*****	*****	*****	1		*****	
La Salle	13, 050	6	i	*****	*****	*****	i	*****	*****	*****
MattoonOak Park	13,552	14	i	*****	6	*****	î	*****	1	*****
Oak Park	39, 830 76, 121	20	2	*****		*****	3			*****
Peoria	25 079	20	2		*****		1	1	2	*****
QuincyRock Island	35, 978	9 7	-		*****		î		4	9
Rock Island	35, 177 59, 183	18			1	*****	2	*****		
Springfield	99, 100	10		*****		*****	-	*****	*****	
Indiana:	29, 767	5	2				5			
AndersonBloomington	11, 595	4	i	*****						
Clinton	10, 962	5		*****		*****	1			
Clinton Crawfordsville	10, 139	1			*****	*****	2			
Fact Chicago	35, 967	13	6	1	*****				1	
East Chicago Evansville	85, 264	18	i			*****	2			
Fort Wayne	98 549	18	6	*****	*****		4			
Fort Wayne	11,585	3			1				2	
Corv	55, 378	22	2							2
Gary	55,378 36,004	19	3		5		2		1	
Huntington	14,000	8	1	1			5			
Indianapolis	314, 194	128	15		39		9		8	8
Kokomo	30,067	10					-4			2
La Fayette Logansport	30,067 22,486	10							1	
Logansport	21,626	6	3		3					*****
Mishawaka	15, 195	2							1	
Munice	36,624	15	1	1						1
Newcastle	36,624 14,458	4		*****						
South Bend	70, 983	12	1		1				3	*****
Terre Haute	66,083	17	1	1	1		8	1		1
Iowa:			1					1		
Burlington	24,057	5					*****			
Cedar Rapids	45, 566						1		*****	*****
Clinton	24, 151	1	4	1			-1		*****	
Council Bluffs	36, 162	10	2		*****	*****	1		*****	
Davenport	56, 727 39, 141		1	*****	2	*****	6			
Dubuque	39, 141		1	1	*****		4	*****	*****	
Marshalltown	15,731			*****		*****		*****		
Mason City	20,065	3	1		*****		1			*****
Muscatine	16,068	6	3	*****	*****	*****	2	*****	*****	
Ottumwa	23,003		9		*****	*****	î			
Ottumwa Sioux City Waterloo	71, 227 36, 230	*******	1	*****			3			*****
Waterioo	30, 230			*****	1		0			*****
Kansas:	19 690						-2			
Atchison	12,630 13,452	3		*****			2		*****	
Coffeyville	10,693	8	1		*****		-			1
Hutchingen	23, 293	0	2		*****	*****	1			
Hutchinson. Kansas City	101, 177		i				3		- 1	
Lawrence	12 456	6			1		-1			
Lawrence. Leavenworth	12,456 16,912		1				2			
Parsons	16, 028	8					1			
Salina	15,085	5	3				3			
Topeka	50,022	13	5						2 3	
Topeka	50, 022 72, 128	39	1	1			3		3	2
Kentucky:	,		1	1		1	-			
Covington	57, 121	19			17					3
Louisville	234, 891	118	10		86	2	3		24	7
Owensboro	17, 424		2						1	
Paducah	234, 891 17, 424 34, 735						4			
Louisiana:										-
New Orleans	387, 219	131	14		1		8		28	22

	Population	Total deaths	Diphi	theria.	Mea	sles.	Sca	rlet er.	culo	er-
City.	Jan. 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Maine:	** ***	9								
Auburn	16, 985 25, 978		*****						2	
Bangor	14.731	2								
Biddeford	18,008	12					*****		····i	,
Lewiston	31, 791 69, 272	16		1			24			******
Portland	10,691	14	5		*****					
Sanford	10,031									-
daryland: Baltimore	733, 826	246	38	1	122	1	52		14	30
Cumberland	29, 837	12	1				1			*****
fassachusetts:	** ***			-31			1			
Adams	12,967 10,036	4	1		2					
Amesbury	18,665	3					1			
Arlington	19, 731	9								
Belmont	19, 731 10, 749 22, 561	3 7			2				1	
Beverly	22, 561	7	77	3	1	2	43	4	39	1
Boston	748,000	327	77	3	152	-	1			
Braintree	10, 580 37, 748 109, 694	13	2		î		2		1	
Brookline	109,694	41	6	1	44		13			
Chelsea	43, 184	41 22	1		1		1		2	
Chicopee	36, 214 12, 979	8 2	5	2			1		2	
Clinton	12,979	2	1 2		2					
Danvers	11, 108 10, 792	2	2							
Dedham	11 261	-	******						1	
Easthampton	11, 261 40, 120	12	1		16	1	3		1	
Fall River	120 485	59	4	1		1	4		1	
Framingham	17,033	11					2			
Cordnor	17,033 16,971 15,462	7 2	1		10		-			
Greenfield	53, 884	73	7		10				3	
Halvoka	60, 203	21	7 1 1		8		1			
Lawrence	94, 270 19, 744	21 36	1		. 19				1	
Leominister		6 46	2				1		2 2	
Lowell	112,479	46	9	2	1		4		3	
Lynn	99, 148 49, 103	15	7	h	10		4		2	
Malden	39, 038	27 15 7 7								
Medford	18 204	7	1				2		2	
Methuen	15, 189 121, 217 15, 618	3			17				5	
New Bedford	121, 217	42	11	2	1		12		. 0	
Newburyport	15,618	17	1		1		3		1	
Newton	46,054	ii		*****						
North Adams Northampton	22, 282 21, 951	11							1	
Peabody	19,552	7 7	1		. 14		3		. 1	
PeabodyPittsfield	41,751	7			1		1			
Plymouth	13,045 47,876	10			32		6		4	1
Quincy	10,874	3	1	*****	34				2	
Somerville	93,091	44	8		. 44		2			
Southbridge	14, 245	5								
Southbridge	14, 245 129, 563	37	7	1	6		9		. 3	
Taunton	37, 137	20	2	1			1			1
Wakefield	13,025 30,915	13	1		70		3	1	1	1
Waltham	21,457	4	i							
Webster	13, 258	4								
West Springfield	13,443 18,604	2					*****		2	
Westneld	18,604	14			. 11				1	
Winthrop	10,400	4 9								
Woburn	15, 455 16, 574 179, 754	65		. 1	7					-
Worcester Michigan:	1	00	1	1	1	1		1	1	1
Alpena	11, 101						5 2			
Ann Arbor	19, 516 36, 164 12, 233	17	2	*****	5		3			
Battle Creek	36, 164	******	- 1		9					
Benton Harbor	603 730	279	59	7	294		75		. 53	
Detroit	993, 739 91, 599 137, 634	21	7				4			-
Grand Rapids	197 634	34	1 3	1	. 1		. 6	1	-1 4	1

City.	Population	deaths	1	Diphtheria.		Measles.		Scarlet fever.		ober- losis.
City.	Jan. 1, 1920, subject to correction.	from all causes.		Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan-Continued.							1.		1	
Holland	12, 166 48, 858 12, 718 34, 273 25, 944 12, 096	15	7	1		1	2		6	
Kalamazoo Marquette	12,718	3					35			
Pontiac	34, 273	8	1		24		1	-	1	
Port Huron	25, 944	4					4			
Sault Ste. Marie	12,096	5					4			
Austin	10, 118	4								
	10,118 98,917 11,089	23					3		. 4	2
Faribault	15,089	1	*****		*****		····i		· i	
Mankato	15, 089 12, 469 380, 582 13, 722 234, 595						4		1	
Minneapolis	380, 582	85	18		30		45	2	11	11
Rochester	13,722	14 68	6				1	2		3 7
Missouri:	234, 393	. 05			3		29	2	12	1 '
Kansas City	324, 410	170	8		1		3		. 9	6
St. Joseph St. Louis. Springfield.	77, 939 772, 897 39, 631	46	2		1		- 6			. 3
St. Louis	772,897	265 16	60	2	1		15		45	14
Montana:		10						******		
Anaconda	11,668									1
Billings. Great Falls	15, 100	3	11	····i					1	1
Missoula	15, 100 24, 121 12, 668	7 7	11	1	1	*****	4		1	*****
Nebraska:								1	1	
Lincoln	54, 934 191, 601	17	1		6		2			1
Omaha Nevada:	191,601	62	1	*****	19	*****	4	*****		1
Reno	12,016	2							1	1
New Hampshire:				1				1	1	-
Berlin	16, 104 22, 167	3								
Concord Dover	13,029	9	1	*****	15				1	
Keene	11, 210	4			13	******	*****		2	
Manchester	11, 210 78, 384	25	9		18	3				1
New Jersey: Asbury Park	12, 400	i			1		-			
Atlantic City	50, 682	11			1		1		1 2	*****
Atlantic CityBayonne.	50, 682 76, 754		1		4		î		2	
BellevilleBloomfield	15,660						2			
Clifton	22,019	5	1 2		9		- 6		1	
East Orange	26, 470 50, 710	12	4		1		9	*****	*****	
Elizabeth	95, 682		5		2		18		1	
Englewood	11,627	6					4		····i	
Garfield	19,381 17,667	6	*****			*****	3		1	*****
Harrison	15, 721		1				1			
Hoboken Jersey City Kearny	68, 166	20	28	2	3	*****	3		2	
Kearny	297, 864 26, 724	10	28	*****	51	*****	24		16	
Montelair	28.810 [3 7					4		2	
MorristownOrange	12, 548 33, 268 63, 824	7		1			1			
Passale	83, 268	7 22	3				10	1	2	
Paterson	135, 866		5		63		8		5	
Perth Amboy	41,707	10	10	· · · i	11		2		1	
Perth Amboy Phillipsburg Plainfield	135, 866 41, 707 16, 923 27, 700	3	1		2		3	*****	····i	·····i
Rahway	11,042	6	i		2		- 2			
Rahway	10, 174 119, 289	1			1					1
Trenton	119, 289	56			3 .		6		3	2
West Hoboken	20, 651 40, 068	10			7		3			*****
West New York	29, 926	6	1		3		2	1	2	
West New York	29, 926 15, 573	8					3			
ew Mexico:	15, 157	14	5	2			7		3	
Albuquerano				- 2						
Albuquerque	15, 15,	**	9	- 1					9	
Albuquerqueew York: Albany	113, 344 36, 192	12	7		14		1 2		2 2	

	Population	Total deaths	Diph	theria.	Mea	isles.		rlet ver.	Tu	ber- osis.
City.	Jan. 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New York-Continued.										
Buffalo	506, 775	147	25	3	2		- 37	1	12	
Geneva	14, 648 15, 025 11, 745	5								
Hornell	15,025	7 3	1		3		*****			
Hudson	11,745	4	1 2	1					3	
IthacaJamestown	17,004	16	5		15	*****	3	******	3	
Lackawanna	38, 917 17, 918	5			10		8	*****	2	****
LackawannaLittle Falls	13,029	4								
Lockport	21, 308	3					1			
Middletown	18, 420 42, 726 30, 366	2					2		1	
Mount Vernon	42,726	13	1		2		9		1	
Newburgh	30, 366	17							1	
New York	5, 621, 151	1,988	199	28	1, 325	17	389	10	1 308	11
Niagara Falls	50,760	12	3 2		3		16	1	1	
North Tonawanda	15, 482 14, 609	7	2					*****		
Ogdensburg	14,609	6						*****		
Olean	20, 506 15, 868	. 15	2			*****	3	*****		
Peekskill	16,503	3 8	····i	*****			····i	*****	1 4	
Port Chester Poughkeepsie	16, 573 35, 000	12		*****	50	*****		*****		
Rochester	295, 750	81	8	1	1		1	*****	14	
Rome	26, 341	8	8 2		17		i			
Saratoga Springs	13, 181	6		******			i		1	1
Schenectady	13, 181 88, 723	29	7				7		6	1
Rome Saratoga Springs Schenectady Troy	72,013	29	2		1		1		3	
Watertown	31, 285	11					3		1	1
Watervliet	16,073	3								
White Plains	21, 031 100, 226	6	1		47		3		1	
Yonkers	100, 226	26	1		5		10			
Charlotte	46, 338 21, 719 19, 861	20					1		4	
Durham	21,719	6 2					*****		4	
Greensboro	24, 418	11	····i	*****			*****		2	
RaleighRocky Mount	19 749	7		*****		*****	*****		-	
Salisbury	12, 742 13, 884 33, 372	6	*****			*****	*****		*****	****
Wilmington	33, 372	14	*****			*****				
Winston-Salem	48, 395	19				*****	2		2	
orth Dakota:										
Fargo	21,961	0					3			
hio:	000 407									
Akron	208, 435	44	8		19		12			
Alliance	21, 603	8	1	*****	*****				1	****
Barberton	22, 082 18, 811	4	*****		*****		1		2	****
Bucyrus	10, 425	4	2		*****					
Cambridge	13, 104		1				1		1	
Cambridge	87, 091 401, 247 796, 836	27	9		11		5			
Cincinnati	401, 247	171	9	2	71		8		11	
Cleveland	796, 836	252	22	5	102	1	70	2	49	
Columbus	237, 031	81	7	1	1		3		5	
Coshocton	10, 847		1							
DaytonEast Cleveland	152, 559 27, 292	45	4	*****	2	*****	3 2		1	
Elyria.	20, 474	3 9	*****			*****	1	*****	2	****
Findlay	17, 021	5		*****	1	*****		*****	ĩ	
Fremont	12, 468	5	*****		-	*****	*****		î	
Fremont. Hamilton.	39, 675	19	*****	*****	*****		2		ī	
Kenmore	12, 683		2				1			
Lancaster	14, 706	5								
Lorain	37, 295				2		1		1	
Mansfield	27.821	11	1				3			
Marion	27, 891		3				2			
Martins Ferry	11,634	2								
Middletown	23,594	6							3	
Newark	26, 718 10, 718	11	2	*****			1		*****	
	10 718	a contract of	1				1			
New Philadelphia	10, 110									
New Philadelphia Niles.	13, 080	3					4			
New Philadelphia Niles Norwood Salem	13, 080 24, 966 10, 305 22, 807	3 5 3	3				3 3		i	

Pulmonary tuberculosis only.

	Population	deatus	Diph	theria.	Men	isles.		arlet ver.		ber- osis.
City.	Jan. 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ohio-Continued.										
Springfield	60, 840	14	1				1		1	1
Steubenville	28, 508 14, 375	10	2		*****	1	1	*****	*****	
TiffinToledo	243, 109	61	13	1	8	11	7		8	8
Youngstown	243, 109 132, 358 29, 569	47	5 2		4	- 1	8		3	9
Zanesville	29, 569	16	2				3			1 2
Oklahoma:	91, 258	29	3		1	1	1			3
OklahomaTulsa	72, 075	20	i		9	1	i			
Oregon:					1	1				
Oregon: Portland	258, 288	86	17		3		11		3	5
Pennsylvania:	70 700		4			1		1		
Alteona	73, 502			*****			3		*****	
Altoona	60, 331 12, 181				24					
Berwick. Bethlehem	50, 358		3		1		5			
Braddock	20, 879								2	
Bradford	15, 525 23, 778	******	;		1					
Butler	58, 030	******	1	*****	2	1	1 5	******	3	
Dickson City	11,049		2			1				
Dubois	18, 681		1				1			
Easton	33, 813		1							
Erie	93, 372 15, 586		3	*****	3		1		2	
Farrell	75, 917		2		1	*****	3		*****	
Hazleton.	32 211				10		i			
Jeannette	10,627		. 2							
Johnstown	67, 327				5 2		4		2	
Lancaster	53, 150		3		2		9	*****	1	
Lebanon	45, 975		i		1			*****		******
McKeesport	24, 643 45, 975 16, 713		î						*****	
Mahanoy City Meadville	15, 599		1							
Meadville	14, 568		1		1		4	*****		
Monessen	18, 179 17, 469		i	*****			*	*****		
Nanticoke	22 614				2	1				******
New Kensington	11, 987 32, 319 14, 928				1		1			
Norristown North Braddock	32, 319	******	1	*****			5 2	*****	1	
Oil City	21 274		1				2	*****	1	
Olyphant	10, 236 1, 823, 158 588, 193								1	
Philadelphia Pittsburgh	1, 823, 158	618	90	12	27		138	6	70	40
Pittsburgh	588, 193		17		47		31	*****	14	
Plymouth Pottstown	16, 500 17, 431	*******	1	*****	5	*****	5		1	
Pottsville	21, 876				7		1	******		
Reading	21, 876 107, 784		8		1		4	*****		
Scranton	137, 783		5		3 2					
ShamokinShenandoah	21, 204 24, 728 13, 428	******	1	*****	2		1	*****		*****
Steelton	13, 428		î	*****		*****		*****		
Sunbury	15, 721				6					
Tamaqua	19 363		3		9					
Uniontown	15, 692 21, 480 11, 717		1		10		6		1	
West Chester	11,717	******		*****	10	*****	1	*****		
Wilkes-Barre			4		16				1	
Wilkinsburg Williamsport	24, 403 36, 198 12, 495	******	1				1	*****		
Woodlawn	12 405		1		5		3	*****	*****	
TT COLLIG WILL	47, 512	*******	4			*****			1	
York									-	
York Rhode Island:					2	1				
Rhode Island: Cranston	29, 407	6			- 4	*****				
Rhode Island: Cranston Cumberland (town)	10,077	1					1			
Rhode Island: Cranston Cumberland (town) Newport	10, 077	11	1 2				1	····i		
Rhode Island: Cranston Cumberland (town). Newport. Pawtucket Providence.	10, 077	1	1 2 4					1		5
Rhode Island: Cranston. Cumberland (town). New port. Pawtucket	10,077	1 11 23	1 2 4				4	1	1	5

	Population	Total deaths	Diph	theria	Mea	isles.		arlet ver.		ber- osis.
City.	Jan. 1, 1920, subject to correction.	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
South Debuter					Finit?	100				
South Dakota: Sioux Falls	25, 176	5	2		4		. 5			
Tennessee:	20, 110		1 7		1077		1	1		
Chattanooga	57, 895						2			
Knoxville	77, 818 162, 351				. 5		1			
Memphis	162, 351	67	4				2		18	8
Texas:	34, 876	55	1	12-	1	1		1		3
AustinBeaumont	40, 422	10								9
Corpus Christi	10.522	4							1	1
Dallas	158 976	47	2		. 73		4		3	3
Fort Worth	106, 482 44, 255 138, 076	33	4		. 1		2		3	3
Galveston	44, 200	6	2			*****			*****	3
HoustonWaco	38, 500	37	2				1		*****	9
Utah:	30,000	-				*****	*****			*****
Salt Lake City	118, 110	40	5		1		3		1	2
Vermont:										
Barre	10,008	1					3			
Burlington	22,779	10			1		8		2	
RutlandVirginia:	14, 954	5			*****		*****		*****	2
Alexandria	18 060	10					1		1	1
Alexandria Danville	18,060 21,539 29,956		3		1				î	
Lynchburg	29,956	7 5	4				5		2	1
Norfolk	115, 777		1	1						9
Petersburg	31,002	9			1		1		2	1
Portsmouth Richmond	171 667	15 79	7	*****	16		3 2	*****	6	3
Roanoke	54, 387 171, 667 50, 842	16	4	*****	10	*****	3		0	1
Washington:	00,012	10		*****						
Bellingham	25, 570						1			
Seattle	315,652		5		1		7			
Spokane	104, 437		1				4	*****		
Tacoma	104, 437 96, 965 15, 503		5	*****	*****		2	*****	1	
Walla Walia West Virginia:	10,000				*****		-			
Bluefield	15, 282	4	1.				1			
Charleston	39, 608	15								1
Clarksburg	27, 869	7	.03	*****	. 1		1			
Fairmont	27, 869 17, 851 50, 177	28	4			*****	1	*****		
Martinsburg	12, 515	20	1	*****	15	*****	*****	*****	*****	-
Morgantown	12, 127			1			2			
Moundsville	10,669	4			10		2			
Parkersburg	20,050	1 6								
Wheeling Wisconsin:	54, 322	22	1		1		1			2
Ashland	11,334		11 .11	14.54			1			
Beloit.	21, 284	2		*****		*****	2		2	
Eau Claire	21, 284 20, 880		1							
Fond du Lac	23, 421	7	1						1	
Janesville	18, 293 40, 472	5	4				1			
KenoshaLa Crosse	30, 363	7	8.	*****	1		1 3	*****	2	
Madison	38, 378	*******	*****	*****	1		2		-	******
Marinette	13,610						ī			
Millwaukee	457, 147		10		1	*****	18		12	
Oshkosh	13,610 457,147 33,162	11	1				1		1	1
Racine	58, 593 30, 955	10	3		*****	*****	10	*****	3	1
Stevens Point.	11, 371		2							
Superior	39, 624	7	2				5			
Superior Waukesha	12,558		ī				7			
Wausau	18,661				1					
West Allis	13, 765								6	
Wyoming:	11 447									
Casper	11, 447 13, 829	5 7			2			*****		*****
valej omne	20,000		*****	*****	-	*****		*****	*****	

FOREIGN AND INSULAR.

PLAGUE ON VESSEL.

Steamship "Tango Maru"-At Thursday Island-From Kobe and Ports.

On December 31, 1921, the steamship Tango Maru arrived at Thursday Island, Queensland, Australia, from Kobe via Nagasaki, Hongkong, Manila, and Zamboange, with a case of plague on board in the person of a third-class passenger who had boarded the vessel at Hongkong, December 20, 1921, and reported sick December 22, 1921. The Tango Maru left Kobe December 13, 1921. At Hongkong 40 passengers were taken on, including the patient subsequently landed at Thursday Island.

AUSTRALIA.

Plague - Queensland.

Bundaberg.—During the week ended March 11, 1922, one case of plague was reported at Bundaberg, Queensland, Australia.

The following is a summary of recent reports of plague in Queens-

land:

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Brisbane.—Week ended December 31, 1921, two fatal cases; week ended January 7, 1922, four cases, and four cases reported during the previous week confirmed; week ended January 21, 1922, two cases; week ended January 28, one case previously reported, confirmed. Total number of cases reported from August 22, 1921, 55, with 28 deaths.

Cairns.-Week ended January 7, 1922, one death.

Townsville.—Two weeks ended January 14, 1922, two fatal cases. Total cases to date, 32; deaths, 21.

Plague Rats and Sentinel Guinea Pigs.

The finding of plague-infected animals in Australia has been reported as follows:

New South Wales-Sydney .- Week ended January 21, 1922, one

plague rat found.

Queensland—Brisbane.—Week ended December 31, 1921, one rat; January 1 to 21, 1922, nine rats; week ended December 31, 1921, two plague-infected sentinel guinea pigs; week ended January 28, 1922, one plague-infected sentinel guinea pig reported found.

Cairns.-Week ended December 31, 1921, one plague rat.

Hinchinbrook (Ingham).-January 1-14, 1922, two plague rats.

BRAZIL.

Campaign Against Tuberculosis.

By legislative decree of December 28, 1921, the Brazilian Congress authorized the Government to establish sanitariums for the treatment of tuberculosis in or near the Federal district and at other points in the interior, preference being given to those States in which the endemic coefficient of tuberculosis is highest. In the extension of these sanitariums, arrangements will be made with State governments for a division of expense. The institutions will be supported by an appropriation to be voted annually by the National Congress. Each sanitarium is to be provided with at least 100 beds. A section will be reserved for pay patients.

The Government is also authorized to assist with loans three private institutions of the same type and capacity which shall have begun to be built within one year after the promulgation of the law and which are completed within two years. The institutions will be required to build especially for the treatment of tuberculosis, on plans conforming with the requirements of the national department of health.

CANADA.

Communicable Diseases-Ontario-December, 1921.

The following table shows the number of cases of communicable diseases occurring in the Province of Ontario, Canada, during the month of December, 1921, as compared with the number reported for the corresponding month of the year 1920. The number of deaths from these diseases is also shown. Population, estimated, 2,523,200.

121 12	1 1				
	Decemb	er, 1921.	December, 1920.		
Disease.	Cases.	Deaths.	Cases.	Deaths.	
Cerebrospinal meningitis Diphtheria Influenza Measles Pneumonia Poliomyelitis (infantile paralysis)	1 600 128 174	3 60 4 2 215 0 16 0 139 5	7 778 45 973 7 711 555 161 59 335	77 74 12 7 242 3 17 5 114 25	

CHINA.

Smallpox-Shanghai.

Under date of January 26, 1922, smallpox conditions at Shanghai, China, were reported to be still serious.¹

¹ Public Health Reports, Feb. 17, 1922, p. 377.

CUBA.

Communicable Diseases - Provinces.

Communicable diseases have been notified in the Republic of Cuba as follows:

Provinces.

NEW CASES REPORTED JAN. 1-10, 1922.

Province.	Chick- en pox.	Diph- theria.	Infan- tile te- tanus.	Ma- laria.	Meas- les.	Para- typhoid fever.	Poliomyelitis (infantile paralysis).	Scarlet fever.	Small- pox.	Ty- phoid fever.
Camaguey	3 2 6	1 3 2	1	19 20 64 4	1	1 1 6	1	10	22	19
Total	21	8	1	108	. 2	9	1	11	91	34
Camaguey Habana Matanzas Oriente Pinar del Rio Santa Clara	9 16 7 13	NEW	CASES R	48 50 5 190 10 4	JAN. 11	2 9 3 1	2	32 1	70 1 94	26 11 12 3 8
Total	61	23	. 3	307	4	15	4	34	166	6

MALTA.

Communicable Diseases-Year Ended March 31, 1921.

The report of the public-health department of the Island of Malta, for the year ended March 31, 1921, shows 651 cases of Mediterranean, Malta, or undulant fever, 248 cases of scarlet fever, 302 cases of tuberculosis, pulmonary, and 517 cases of typhoid fever. The total number of deaths reported for the period was 4,584, in a population of 226,224.

Mediterranean, or Malta, fever (also called undulant fever) continues to play an important rôle in morbidity in Malta, and constant efforts are made to combat the disease. Warnings to the public to boil all goats' milk before using are periodically issued. During the year under report, 5,729 goats were examined and an average of 6.9 per cent of these were found infected. Vaccination of goats against the fever has been carried on in the island but with negative results.

RUSSIA.

Typhus Fever-Saratov District.

Under date of January 31, 1922, typhus fever was stated to be gaining greatly in the district of Saratov, eastern Russia. In the town of Markstadt, in the German Communes, there were reported

present in hospitals and childrens' homes, 94 cases during the month of September, 1921, 172 cases in October, 797 cases in November, and 924 cases in December. The mortality was stated to be about 10 per cent.

SWEDEN.

Influenza-Goteborg.1

Influenza has been reported at Goteborg, Sweden, as follows: Week ended February 4, 1922, 649 cases with 7 deaths; week ended February 11, 1922, 873 cases with 11 deaths. (Population, census of Dec. 31, 1921, 228,053.)

UNION OF SOUTH AFRICA.

Smallpox-Typhus Fever-November, 1921.2

During the month of November, 1921, smallpox and typhus fever were reported in the Union of South Africa as follows:

Smallpox.—Among the colored population, 216 cases with 5 deaths. These were distributed as follows: Cape Province, 17 cases with 1 death; Natal, 170 cases with 4 deaths; Orange Free State, 7 cases; Transvaal, 22 cases. Among white inhabitants 8 cases were reported.

Typhus fever.—Among the colored population, 573 cases with 79 deaths. These were distributed as follows: Cape Province, 473 cases with 70 deaths; Natal, 55 cases with 7 deaths; Orange Free State, 41 cases with 1 death; Transvaal, 4 cases with 1 death. Among the white population 7 cases with 1 death were reported, occurring in the Cape Province.

VIRGIN ISLANDS.

Contagious Diseases-January, 1922.

The occurrence of contagious diseases in the Virgin Islands during the month of January, 1922, has been reported as follows:

Island and disease.	Cases.	Remarks.	
In St. Thomas and St. John: Chancroid. Chicken pox. Gonococcus. Measles. Syphilis. In St. Croix: Dengue. Dysentery. Filariasis. Gonococcus. Malaria. Mumps. Schistomiasis. Syphilis. Trachoma. Tuberculosis.	5 93 2 4 1 8 3 1 2 1 6	3 imported. 65 St. John. 1 imported. Entamebic. Aestivo-autumnal.	

Public Health Reports, Mar. 3, 1922, p. 516.
 Public Health Reports, Oct. 21, 1921, p. 2651; Nov. 18, 1921, p. 2865; and Dec. 16, 1921, p. 3114.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER. Reports Received During Week Ended Mar. 17, 1922.1

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CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Provinces-	Jan. 15-21 Dec. 25-31	16	8	-1

PLAGUE,

			4.7
11-12/4 (51)			Jan. 15-21, 1922, one plague rat
	1	2	Aug. 22, 1921–Jan. 28, 1922: Cases, 55; deaths, 28. Dec. 25, 1921– Jan. 28, 1922: 10 infected rats
		1	and 3 infected sentinel guinea pigs. Also 4 cases reported previous week, confirmed.
Jan. 22-28			1 case reported previous week confirmed.
			Dec. 25-31, 1921: 1 plague rat
		1	Jan. 1-14, 1922: 2 plague rats found. To Jan. 14, 1922: Cases, 32; deaths, 21.
Jan. 15–21	3	4	1 plague rat.
***************************************			Jan. 8-14, 1922: Cases, 1,609; deaths, 1,283.
		1	City and district, Dec. 18-24, 1921: Three plague rats. City
			and district, Jan. 8-14, 1922 1 plague rat.
			At Thursday Island quarantine,
	Jan. 1-7. Jan. 15-21. Jan. 22-28. Mar. 5-11. Jan. 1-7. Jan. 1-14. Jan. 15-21. Jan. 15-21. Jan. 15-28. Jan. 22-28.	Jan. 1-7	Jan. 1-7 4 Jan. 15-21 2 Jan. 22-28 2 Mar. 5-i1 1 Jan. 1-7 1 Jan. 1-14 2 Jan. 15-21 3 4 4

SMALLPOX.

Canada	Feb. 19–25	2		Dec. 1-31, 1921: Cases, 128. 20 miles from Campbellton.
Chile: Talcahuano	Jan. 22-28	1		
	Jan. 15–28 Jan. 23–Feb. 5	3 6	2 37	Cases, foreign (pop. 24,000). Deaths, native (pop. 790,000). Jan. 1-31, 1922; Cases, 257.
Haiti:	• • • • • • • • • • • • • • • • • • • •			Jan. 1-31, 1922: Cases, 257.
Cape HaitienIndo-China:	Feb. 12-18	6		
	Dec. 18-24 Jan. 8-14	1	1	City and district.
Mexico: San Luis Potosi	Feb. 19-25		. 3	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

Reports Received During Week Ended Mar. 17, 1922-Continued.

SMALLPOX-Continued.

Date.	Cases.	Deaths.	Remarks.
			Nov. 1-30, 1921: Cases, 216 deaths, 5 (colored). White 8 cases. Nov. 1-30, 1921: Cases, 17; deaths 1 (colored).
			Nov. 1-30, 1921: Cases, 170 deaths, 4 (colored). Nov. 1-30, 1921: Cases, 7 (colored) Nov. 1-30, 1921: Cases, 22 (colored). Among white population, 8 cases, State not design

TYPHUS FEVER.

China: Harbin Mexico: San Luis Potosi Russia:	Jan. 9-22 Feb. 19-25	12	1	
Saratov District— Markstadt				Sept. 1-Dec. 31, 1921: Cases, 1,987; mortality, about 10 per cent;
Union of South Africa				Nov. 1-30, 1921: Cases, 573; deaths, 79 (colored). White, 7 cases, 1
Cape Province				death. Nov. 1-30, 1921: Cases, 473; deaths, 70 (colored). Among white
Natal				population, 7 cases, 1 death. Nov. 1-30, 1921: Cases, 55; deaths, 7 (colored).
Orange Free State				Nov. 1-30, 1921: Cases, 41; deaths, 1 (colored).
Transvaal				Nov. 1-30, 1921: Cases, 4; deaths, 1 (colored).

Reports Received from Dec. 31, 1921, to Mar. 10, 1922.

CHOLERA.

India	Oct. 30-Nov. 5			0-1 0 17-		
	Oct 20 Nov 5		*********	Oct. 2-Nov. 30,372.	26, 1921:	Deaths,
		1		30,312.		
Bombay		71	60			
Calcutta	Oct. 23-Dec. 31	34	29			
Do	Jan. 1-21	34				
Karachi	Nov. 6-12		1			
Madras	Dec. 11-31	4	1			
Do	Jan. 1-21	9	6			
Rangoon		30	24			
Do	Jan. 1-14	5	3			
Indo-China:						
Saigon	Nov. 6-12	1	1			
Java:		_	- 1			
West Java-						
Batavia	Nov. 1-7	2	2	At Lebak.		
Philippine Islands:	NOV. 1-1	-	-	At Loudn.		
Manila	Nov. 13-Dec. 31	40	18			
		49				
Do	Jan. 1-14	45	13			
Provinces—						
Pampanga	Dec. 25-31	1				
Zambales	Dec. 11-31	31	18			
Poland				Aug. 14-Sept.	10, 1921.	Cases, 4;
				deaths, 1.		
Russia:						
Kharkoff	Jan. 28			Present.		
Kieff	Dec. 15-Jan. 11	250				

Reports Received from Dec. 31, 1921, to Mar. 10, 1922-Continued.

CHOLERA-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Russia—Continued.				
Latvia— Riga				At quarantine station in October
			-	1921: One case.
Odessa	Jan. 28		********	Present.
Bangkok	Oct. 23-Dec. 21	. 8	4	
	PLA	GUE.		
Asia Minor: Smyrna Australia: New South Wales—	Nov. 27-Dec. 3	. 1	1	
Sydney Do	Jan. 29-Feb. 25	2 4	1	Dec. 7-13: 4 plague rats.
Queensland— Brisbane	Oct. 30-Dec. 21	27	18	Total, Aug. 22-Dec. 24, 192 Cases, 39; deaths, 25. Total
Do	Jan. 21-28	3		infected rats, 53.
Cairns	Cct. 30-Dec. 10	6	3	Plague rats: 8.
CooktownIngham	Oct. 30-Nov. 5	1		Pestis minor. Nov. 6-Dec. 24, 1921: Plague rats 14.
Inisfail	*********			Nov. 27-Dec. 3, 1921: 1 plague rat
Ipswich	Dec. 11-17	1	1	
Townsville	Nov. 13-19 Nov. 20-Dec. 3	2	2	Total cases, 27; deaths, 18.
Islands—	V 44 00	2	2	*
FayalSt. Michael	Jan. 16-22	2	2	Nov. 27-Dec. 31, 1921: Cases, 2: deaths, 9, Jan. 1-21, 192: Cases, 13; deaths, 8.
Arrifes	Dec. 25-31 Jan. 1-7	1	1	Cases, 13; deaths, 8. 3 miles from port.
Fenaes d'Ajuda	Nov. 27-Dec. 3			Present. 6 miles from port.
Do Ribeira Grande	Jan. 15-21	3 19	8	9 miles from port.
Do	Nov. 13-Dec. 10 Jan. 8-14	9	6	
Livramonto	Dec. 4-10do	1		Vicinity of Ponta Delgada.
Ponta Delgada				
Bahia	Oct. 30-Dec. 31 Jan. 1-7	13 2	12 2	
Uganda	Aug. 1-Oct. 31	90	61	Reports of inspectors, deaths 343; reports of chiefs, deaths
Ceylon: Colombo	Oct. 30-Dec. 31	13	10	651. Oct. 30-Dec. 24, 1921: Roden plague, 6.
Do	Jan. 1-14	7	7	Infected rats, 7.
Hongkong	Nov. 20-Dec. 17 Jan. 1-14	6	4	
Ecuador: Guayaquil	Nov. 16-Dec. 31	18	6	Rats examined, 2,958; found in fected, 90. Total, July-Det 15, 1921: Cases, 28. Jan. 1-31 1922: Rats examined, 6,200
Do	Jan. 1-31	20	9	
Egypt				Jan. 1-Dec. 31, 1921: Cases, 356 deaths, 153. Jan. 1-Feb. 2 1922: Cases, 12, deaths, 6.
City— Alexandria	Dec. 5-30 Jan. 17-24	7 3	2 2	1922: Cases, 12, deaths, 6.
Port Said	Dec. 20	1		
Suez Do	Nov. 22-Dec. 31 Jan 2-29	16	9 2	
Province-			-	
Girgeh	Jan. 12	1		Septicemic.
Keneh	Dec. 1	1 2	1	Do. 1 case septicemic.
1/0				

Reports Received from Dec. 31, 1921, to Mar. 10, 1922-Continued.

PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Greece:				
Preveza	. Feb. 8			Outbreak. Port on the Ionian Sea.
India				Oct. 23-Dec. 31 1921: Cases 8 690
Bombay	Oct. 23-Dec. 24	7	6	deaths, 6,458 (Reports, weeks ended Dec. 3 and 17, 1921; missing). Jan. 1-7, 1922; Cases 1,944; deaths, 1,518.
Do	Jan. 1-7	1		ended Dec. 3 and 17, 1921
Karachi.	Nov. 6-Dec. 31	5 3		missing). Jan. 1-7, 1922; Cases
Do Madras	Dec 11-17	1		1,911, destils, 1, 515.
Madras Presidency	Nov. 13-Dec. 31	2,047	1,438	
Do	Jan. 1-21	771	542	
Rangoon	Oct. 1-Dec. 31	139	129	
Do	Jan. 1-14	38	36	
Indo-China:				Nov. 6-Dec. 10, 1921: Roden
SaigonItaly:		*******		plague, 7.
Catania	Nov. 27	1	1	plague, 7. Total, Oct. 16-Nov. 27, 1921 Cases, 8 (of which 1 doubtful) deaths, 5.
Naples (Province)— Torre Annunziata	Oct 22-Dec 27	2		17 miles from city of Naples.
Venice	Oct. 27	1		
Java				Islands of Java and Madoera, Nov. 1-30, 1921; deaths, 763.
East Java—				Nov. 1-50, 1921, deaths, 105.
Soerabaya	Oct. 30-Dec. 10	11	12	
Madagascar:		1		
Tananarive	Feb. 4			Present.
Mauritius (Island): Port Louis	Oct. 29-Nov. 30	159	101	Plague-infected rats, 176: plague-infected cats, 36. (Corrected report).
Mesopotamia:				reports.
Bagdad	Oct. 1-31	1	1	
Mariant	1			D 10 01 1001. I-f1-1-1-1-1-1
Tampico			*********	found, 5; total, Jan. 1-Dec. 31,
100				Dec. 18-31, 1921: Infected rodents found, 5; total, Jan. 1-Dec. 31, 1921, infected rodents, 322 Jan. 1-Feb. 18, 1922, 9 plague infected rodents.
Vera Cruz				One infected rodent caught Dec.
Domis				5, 1921. Nov 17-Dec 31 1921: Cases 94
Peru				Nov. 17-Dec. 31, 1921: Cases, 94 deaths, 35. Occuring in Cal lao, Huacho, Huaras, Lima Magdalena Vieja, Paita, Sala verry, and Sechura. Jan. 1-15 1922: Cases, 28; deaths, 12 (Corrected report.)
Localities— Bambamarca	Jan. 15.			Present. Rural.
Cal ao.	do	2		Present. Rural. Rural. Year, 1921: Deaths, 30.
				Rural.
Guda.upe. Guada.upe. Huacho. Huaral. Jayanca. Lima.	do	6	2	
Huacho	do	1 2		
Javanea	do			Present.
Lima	do	2		In district, 2 cases; 1 death.
PaytaSan Pedro	do	4.4	8	
Can Padro	do	1		
San reuro			1	
Su.lana			1	
Su.lana Portugal:		1	1	
Sudana Portugal: Lisbon Portuguese West Africa: Angola—	Dec. 15	1		
Su.lanaPortugal: LisbonPortuguese West Africa:	Oct. 9-Nov. 5	1 3	2	
Su.lana Portugal: Lisbon Portugaese West Africa: Angola— Loanda Rhodes (Island) (Aegean Sea) Siam: Bangkok. Straits Settlements:	Oct. 9-Nov. 5 Oct. 13 Oct. 23-Dec. 17	3 6	2 1 6	
Su.lana Portugal: Lisbon Portuguese West Africa: Angola— Loanda Rhodes (Island) (Aegean Sea) Siam: Bangkok Straits Settlements: Singapore Syria:	Oct. 9-Nov. 5 Oct. 13 Oct. 23-Dec. 17 Nov. 6-Dec. 31	1 3 6 3	2	
Su.lana Portugal: Lisbon Portugaese West Africa: Angola— Loanda Rhodes (Island) (Aegean Sea) Siam: Bangkok. Straits Settlements:	Oct. 9-Nov. 5 Oct. 13 Oct. 23-Dec. 17 Nov. 6-Dec. 31	1 3 6 3	2 1 6	

Reports Received from Dec. 31, 1921, to Mar. 10, 1922-Continued.

PLAGUE-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa:				
Orange Free State-	N 10			Di
Bothaville	Nov. 19 Dec. 4-10	1		Plague-infected mouse found. In native herd boy.
On vessel: S. S. Polycarp	Feb. 3	1		At Para, Brazil, from Ceara, via Manaos, Maranham, and Para for New York.
		1	1	for New York.
	SMAL	LPOX.	,	
Arabia:				
Aden Do	Dec. 25-31 Jan. 8-14		1 1	
Asia Minor:	Tom 17 01			In district.
Smyrna Bolivia:	Jan. 15-21	1		In district.
La Paz Brazil:	Aug. 1-Oct. 31	42	28	, ,
Bahia	Nov. 6-Dec. 17	4		
Rio de Janeiro	Nov. 13-Dec. 31	13	2	
Sao Paulo	Jan. 1-21 Oct. 31-Dec. 25	11	1	1
DoBritish East Africa:	Dec. 26-Jan. 1	i		1
Uganda	Aug. 1-Sept. 30	7		Reports of inspectors; cases, 4.
British Columbia—				
Vancouver	Dec. 25-31 Jan. 29-Feb. 4	3		
Do	Jan. 29-Feb. 4	1		Voor 1001: Coope 71
Manitcba	Nov. 20-Dec. 3	2		Year 1921: Cases, 71.
Charlotte County				Dec. 17, 1921: 31 cases previously
St. Stephen	Dec. 11-17 Dec. 11-31	2 3		reported, occurring at Ander-
Restigouche County	Feb. 12-18	2		reported, occurring at Ander- sonville and Blacks Harbor. Dec. 18-24, 1921: Cases, 3. Dec.
York County Do	Dec. 11-17 Jan. 29-Feb. 4	1		25-31, 1921: Cases, 2.
Ontario— Fort William and Port Arthur.	Jan. 1-21	3		
Hamilton	Jan. 22-28 Jan. 17-Feb. 11	3 5		Jan. 16-20. 1922: Two cases re-
Niagara Falls	Dec. 11-24	2		ported.
Do	Dec. 11-24 Jan. 15-Feb. 18	20		
North Bay	Feb. 12-18	1		
Ottawa Do	Dec. 11-24 Jan. 1-Feb. 25	17 26		
Sault Ste. Marie	Jan. 15-21	1		
Toronto	Dec. 11-24 Jan. 1-Feb. 18	4		
Windsor	Jan. 8-14	43		
Quebec— Montreal Saskatchewan—	Dec. 11-24	1		
Regina	Jan. 1-21 Dec. 1-18	3 6		4 7
Do	Feb. 5-9	2		
Canal Zone:				Admitted to hospital by transfer
Santani				from Panama, Nov. 30, 1921, 1 case. Arrived on sailing vessel from a village on south coast.
Ceylon: Colombo	Nov. 27-Dec. 3	1		Port case.
Chile	Nov. 21-Dec. 3	1		Nov. 15-21, 1921: Diffused in southern Provinces; not epi-
Concepcion	Nov. 23-Dec. 26		25	demic. Nov. 15-21, 1921: Present. In vicinity, at Hualqui, cases, 32; deaths, 5. Dec. 4-17, 1921: Present.

Reports Received from Dec. 31, 1921, to Mar. 10, 1922-Continued.

SMALLPOX-Continued.

	Date.	Cases.	Deaths.	Remarks.
Chile—Continued.				
Coronel	Nov. 15-Dec. 17			Present.
Curanilahue	Nov. 15-21	4		
Talcahuano	Nov. 15-Dec. 21	6		
Do	1 Jan. 8-21			Do.
Temuco	Nov. 15-21 Oct. 23-Dec. 31	9		
Valparaiso	Oct. 23-Dec. 31		94	
Do	Jan. 1-21		39	-
China:		1		
Amoy	Nov. 16-Dec. 31		7	Nov. 23-29, 1921: Present.
Do	Jan. 1-14		. 3	
Antung	Nov. 28-Dec. 18	4	1	
Canton	Dec. 1-31			Present.
Chungking	Nor 6-Dec 21	1	1	Do.
Do	Jan. 1-7. Nov. 6-Dec. 31 Jan. 1-14. Nov. 13-Dec. 31			Do.
Foochow	Nov. 6-Dec. 31			Do.
Do	Jan. 1-14			Do.
Hankow	Nov. 13-Dec. 31			Do.
Do	Jan. 1-21 Nov. 14-Dec. 11	2		
Harbin	Nov. 14-Dec. 11	5		
Do	Dec. 26-Jan. 1	2		16.1
Hongkong	Dec. 3-31			
Do	Ion 1-14	3	1	
Mukden	Nov. 20-Dec. 31			Do.
Do	Jan. 15-21			Do.
Nanking	Nov. 20-De 17	********		Do.
Nanking Shanghai	Oct. 31-Dec. 31	67	194	Cases, foreign: Deaths, Chinese and foreign. Jan. 14, 1922 Conditions serious.
Do	Jan. 2-22	22	114	Cases, foreign: Deaths, native. Jan. 14, 1922: Seriously preva- lent.
mm1 - 4 -1 -	D 11 15			
Tientsin Tsingtau Chosen (Korea):	Dec. 11-17	5	4	In Mission Hospital.
Fusan Colombia:	Dec. 1-31	3	1	
Cartagena	Nov. 22-28		1	
Cuba				Dec. 4-31, 1921: Cases, 361.
Antilla	Dec. 12–31 Jan. 8–Feb. 4	3	1	At Preston.
Do	Jan. 8-Feb. 4	13	1	
Cienfuegos	Jan. 22-28	1		From outside city limits.
Santiago	Jan. 1-31	5	********	
Czechoslovakia:				
Prague	Dec. 18-24		42	
Dominican Republic		•••••		Oct. 1–31, 1921; Cases, 653; deaths, 54. Jan. 2–Feb. 4, 1922; Cases, 6,922; deaths, 185.
Puerta Plata	Jan. 13	100	5	In district, widely diffused with 1,000 estimated cases with 100 deaths.
San Pedro de Macoris	Nov. 20-Dec. 31	31	1	Estimate of about 500 cases of smallpox in the district of Ma- coris; of this amount 50 within
Do Santo Domingo	Jan. 14-Feb. 4 Nov. 15-Dec. 5	122		the city limits. In district 401 cases estimated. Dec. 17-24, 1921: Present in vicinity. Jan. 9-16, 1922: In surrounding country, 1,745
				cases (estimated)
Plane	1			cases (estimated). Dec. 27, 1921-Jan. 2, 1922: Cases,
Fiume				2.
Paus Jan				2.
Guayaquil Do	Nov. 16-Dec. 31 Jan. 1-15	7		And vicinity.
Egypt:				
Alexandria	Nov. 26-Dec. 2	1	1	
Cairo	Nov. 26-Dec. 2 Nov. 26-Dec. 2	2		
Port Said	I/Ct. all allegeneres			
Do	Jan. 22-28	1		
Finland				Nov. 16-30, 1921: 1 case.
Manchester	Jan. 1-7 Dec. 4-31	4		
Nottingham	Dec. 4-31	18		
Do	Jan. 8-28	3	********	Y
Swansea	Jan. 17-23	2		Imported on vessel from Persian Gulf.

Reports Received from Dec. 31, 1921, to Mar. 10, 1922-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Haiti				Jan. 22-28, 1922: A few cases,
Cape Haitien	Dec. 11-24	8	1	
Do	Jan. 1-Feb. 11 Dec. 11-31	15	1	Present.
Port au Prince	Jan. 15-21	2		r resent.
India				Oct. 2-8, 1921: Deaths, 28. Oct
Bombay	Cet. 23-Dec. 31	3	2	23-Nov. 19, 1921: Deaths, 266.
Do	Jan. 1-7. Nov. 13-Dec. 31	1		
Calcutta	Jan. 1-21	37	28 19	
Do Karachi	Nov. 11-Dec. 31	28	9	
Do	Jan. 1-21	17	9	
Madras	Nov. 13-Dec. 31	183	59	
Do	Jan. 1-21 Oct. 1-Dec. 31	167	66	
Rangoon Italy:	Cci. 1-Dec. 31		*********	
Geno1	Nov. 10-20	1		
Messina—				1-
Messina	Nov. 28-Dec. 4	1 2		
Pettineo Venice	Nov. 14-Dec. 4 Jan. 30-Feb. 5	2	********	
Japan:	**************************************			
Kobe	Jan. 23-29	3	1	
Taiwan Island	Dec. 1-20	2	1	
Yokohama	Jan. 9-21	3		
West Java—				141
Bandoeng	Nov. 18-Dec. 8 Nov. 18-Dec. 22 Dec. 30-Jan. 5	2		
Batavia	Nov. 18-Dec. 22	11	9	City and Province.
Do	Dec. 30-Jan. 5	7	2	In Province: Cases, 6; deaths, 3,
Buitenzorg Krawang	Nov. 25-Dec. 8 Nov. 18-24 Nov. 18-Dec. 8 Nov. 25-Dec. 1	í		13 cases, with 3 deaths, not locally stated.
Lebak	Nov. 18-Dec. 8	7	4	Statut.
Fan leglang	Nov. 25-Dec. 1		1	
Tangerang	Nov. 18-Dec.8	5	1	
Liberia: Grand Bassa County	Nov. 30			Present at Lower Buchannan.
Mesopotamia: Bagdad	Oct. 1-Nov. 30	117	50	Epidemic with high mortality in
				November, 1921.
Mexico: Chihuahua	Dag 5 11			
Do	Dec. 5-11		1	4.00
Gnadalajara	Jan. 23-29. Nov. 1-Dec. 31	- 6		
Do	Jan. 1-31	11	2	
Mexico City	Nov. 20-Dec. 31	64		Including municipalities in Federal District. Do.
Saltillo.	Jan. 1-7 Jan. 29-Feb. 4	16	1	From San Salvador, Zacatecas
San Luis Potost	Dec. 18-24		2	-1011 -411 -411 -411
Do	Jan. 8-Feb. 18		6	
Torreon	Dec. 1-31	134		
Do Newfoundland:	Jan. 1-31		78	
St. Johns	Feb. 4-10	1		
Palestine:				
Jerusalem	Jan. 10-30	22		
Panama: Bocas del Toro Province—				
Sursuba	Jan. 18-Feb. 8	11		Village 24 miles from Almirante.
Chiriqui Province	Dec. 22			Present.
Do	Jan. 26			Present with center of prevalence
Danoma	Dec 11			at Bosquete Bajo.
Panama	Dec. 14	1		On Dec. 21, 1921: 1 additional case from country district of Sabanas, admitted to hospital. Total admissions, Jan. 1-Dec. 21, 1921, 207.
Peru:				, 1000, 000
Lima	Nov. 1-Dec. 31		3	
Poland				Aug. 14-Dec. 3, 1921; Cases, 494; deaths, 112. Exclusive of Brest-Litovsk, Minsk, and Wilno districts.
Portugal:				William Gistricis.
Lisbon	Nov. 13-Dec. 31	48	12	
Do	Jan. 1-28	46	1	

Reports Received from Dec. 31, 1921, to Mar. 10, 1922-Continued.

SMALLPOX-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portuguese East Africa: Lourenco Marques	Oct. 1-Nov. 5	2	4	
Portuguese West Africa: Angola—				
Loanda	Oct. 9-Dec. 31		7	
Bucharest	Nev. 1-30	23		
EsthoniaLatvia	Oct. 1-Dec. 31 Oct. 1-Nov. 30	38 55		-
Serbia: Belgrade	Oct. 2-Nov. 26	16	4	
Bangkok	Oct. 23-Nov. 5	1		
Spain: Barcelona	Jan. 8-14	-	1	
Huelva	Oct. 1-Nov. 30		2	
Malaga	Nov. 1-Dec. 31		60	
Seville	Nov. 16-Dec. 31		7	
Do	Jan. 8-28		5	11
Valencia Straits Settlements:	Jan. 22-28	1		1,
Singapore	Nov. 6-Dec. 24	49	13	
Do	Jan. 1-7	-		
Glarus, Canton	Dec. 10			Epidemic.
Zurich	do	2		In vicinity.
yria:	D 10 01			Present
Adana	Dec. 18-24			Present. Do.
Do	Jan. 1-14			Do.
Aleppo	Dec. 18–24 Jan. 1–Feb. 4			Do.
Do	do	******		Do.
Alexandretta	do	5	2	20.
Beirut	Top 9 99	8	-	
Cilicia	Ion & Fob 4	. 0	*********	Do.
Diarbekir.	Dec. 18-24	******	*********	Do.
Do.	Ian 1-Feb 4			Do.
Mersina	Jan. 1-Feb. 4 Dec. 18-24			Do.
Do	Jan. 1-7			Do.
Urfa	Dec. 18-24			Do.
Do	Jan. 1-Feb. 4			Do.
Tunis:	Nov. 26-Dec. 23	17	15	
Tunis Do	Jan. 1-Feb 4	4	5	
furkey:	Nov. 27-Dec. 24	20	4	
Constantinople	Jan. 15-28		5	
Union of South Africa:	Now ! Dec 01			Outbreaks.
Cape Province	Nov. 5-Dec. 31			Do.
Do	Jan. 8-14			Do.
Natal Orange Free State	Oct. 23-Dec. 24	******		Do.
Southern Rhodesia	Dec 29-Jan 18	16		200
Transvaal.	Dec. 29-Jan. 18 Oct. 23-Dec. 31	40		Do.
Do	Oct. 23-Dec. 31 Jan. 1-14 Dec. 1-31			Do.
Johannesburg District	Dec. 1-31	1		
Do	Jan. 1-7			Do.
ugoslavia				July 3-30, 1921: Cases, 37.
Bosnia Herzegovina	July 3-9	2		
Croatia Slavonia		1		
Dalmatia	do	1		
Serbia	do	3	********	
Slavonia	do	1		
Voivodina	do	3		
On vessel: S. S. West O'Rowa		3	1	At Kobe, Japan, from Shangha
				China
8. 8. ——	Jan. 17-23	2		At Swansea, Wales, from Per

Reports Received from Dec. 31, 1921, to Mar. 10, 1922—Continued. TYPHUS FEVER.

Place.	Date.	Cases.	Deaths.	Remarks.
Algeria:				
Algiers	Nov. 1-Dec. 31	3		
Do	Jan. 11-20	1		
Oran	Dec. 21-31	1		
Do	Jan. 1-10		1	
Asia Minor:				
Brousa	Jan. 15-21	1		
Austria:				
Vienna	Dec. 4-31	10	1	
Do	Jan. 1-21	4		
Bolivia:	Ann 1 Oct 21	83	65	
La Paz Bulgaria:	Aug. 1-Oct. 31	00	65	
	Dec. 18-24	1		
SofiaChile:	Dec. 18-21	-	*********	1.00
Concepcion	Nov. 22-Dec. 26		3	
	Ian 3-16		2	
Valparaiso	Jan. 3–16 Cet. 23–Nov. 26		6	
Do	Jan. 1-7		1	
China:			-	-
Antung	Dec 28-Ian 1	1		
Harbin	Nov 7-Dec 25	12		Jan. 23, 1922: Reported extend-
Do	Dec. 26-Jan. 1 Nov. 7-Dec. 25 Dec. 26-Jan. 8	4		ing from Soviet Russia, along
Du	Dec. 25 5an. 6	-		railway line to maritime prov
				inces.
Found:				4-7
Egypt: Alexandria	Nov. 19-Dec. 31	3	1	1 -12
	Jan. 15-28	9	1	
Cairo	Cct. 1-Dec. 9	11	7	
Cairo Port Said.	Jan. 22-28	1		
Germany:	Juli. 22 20			
Breslau	Dec. 25-31	2	1	
Do	Jan. 1-15	37	4	
Hamburg	Dec. 11-17	4		
Great Britain:	200. 11 1111111111	-		
Glasgow	Dec. 25-31	1		
Italy:	200, 20 0111111111	-		
Palermo	Jan. 15-28	3	1	
Mesopotamia:	VIII 10 2011111111			2
Bagdad	Oct. 1-Nov. 30	2	9	
Mexico:		1		
Mexico City	Nov. 20-Dec. 31	242		Including municipalities in Fed
				eral District.
Do	Jan. 1-7. Dec. 18-21	42		Do.
San Luis Potosi	Dec. 18-24		1	Dec. 25-31, 1921: Present.
Do	Jan. 8-Feb. 11			Present.
Palestine:				
Jerusalem	Dec. 27-Jan. 16	5		
Poland				Aug. 14-Nov. 5, 1921: Cases 2,399; deaths, 173. Nov. 6 Dec. 3, 1921: Cases, 1,512 deaths, 105. Exclusive o Brest-Litovsk, Minsk, and
District—		1		2,399; deaths, 173. Nov. 6
Bialystok	Nov. 20-Dec. 10	116	3	Dec. 3, 1921: Cases, 1,512
Galicia-				deaths, 105. Exclusive o
Lemberg	Jan. 3	229		Wilno districts. Nov. 20-Dec 10, 1921: Cases, 1,162; deaths
Kielce	Nov. 20-Dec. 10	31	8	Willio districts. Nov. 20-Dec
Krakow	do	45	6	10, 1921: Cases, 1,192; deaths
Lodz	do	67	*******	89.
Lublin Lwow	00	59 121	16	
Lwow		249		
Nowogrod	do	83	15 5	
Polesia	do	88	8	
Stanislawow	d0	86	17	
Tarnopol	d0	89		
Volhynia	do	81	4 2	
Warsaw	do		5	
Warsaw City Do	Tan 11	50	0	
	Juli. 11	30		
Portugal:	Jan. 8-Feb. 11	6	2	
Oporto	Jan. 5-1 CD. 11	0	-	
Rumania:	Nov. 1-30	3		
	Nov. 1-30dodo	7	*********	
Bucharest			********	Nov. 28-Dec. 10, 1921: In Soviet
Chisinau				
Chisinau Russia	***************	69		Russia, cases, 7 681
Chisinau Russia Esthonia	Oct. 1-Dec. 31	53		Russia, cases, 7,681.
Chisinau	Oct. 1-Dec. 31	53 127 4		Russia, cases, 7,081.
Chisinau Russia Esthonia	***************	127		Russia, cases, 7,081. Oct. 1-31, 1921: Cases, 839; Nov.

Reports Received from Dec. 31, 1921, to Mar. 10, 1922-Continued.

TYPHUS FEVER-Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Serbia: Belgrade	Oct. 2-Nov. 28	3	2	Jan. 23, 1922: Present in western
Chita	Dec. 26			
Turkey: Constantinople. Do Union of South Africa: Cape Province. Do.		1	8	
Cape Province			*******	Oct. 23-Dec. 24, 1921: Outbreaks Jan. 1-14, 1922: Outbreaks.
East London	Oct. 30-Dec. 24	3		One death in European at Jul
Natal				senville, Dec. 6, 1921. Outbreaks. Stated to be preva- lent only in Newcastle District
Orange Free State	Nov. 13-Dec. 31 Jan. 1-14			Outbreaks. Do.
Transvaal	Jan. 8-14	26	4	Do.
Venezuela: Maracaibo		1	1	
Yugoslavia			*********	July 3-30, 1922: Cases, 13.
Bosnia Herzegovina	July 3-9	1		6.1
Zagreb	Jan. 1-14	2 2		
	YELLOW	1		
Mexico				Year 1921: Cases, 115: deaths, 53

	IELLOW	FEVE	n.	
Mexico. Colima (State) Colima Manzanilo. Jalisco (State). Guadalajara. Puerta Vallarta (Las	Oct. 27. Aug. 21. Nov. 1-30. Oct. 5-Dec. 17.	3	3 1 1 5	Year 1921: Cases, 115: deaths, 53. Year 1921: Cases, 7; deaths, 4. Year 1921: Cases, 13; deaths, 7. Imported.
Penas). Tomila. Quintana Roo (Territory)— Payo Obispo. Sinaloa (State). Culiacan. Guamuchil. Mazatlan. Palmar de los Leales. Tamaulipas (State). Tampico. Vera Cruz (State). Alamo. Alvarado. Barra de Penn. Cordoba.	Aug. 31. Aug. 8. Sept. 17. Oct. 10. Aug. 21. Sept. 30. Jan. 11 June 21. July 3. July 18. Sept. 22.	1 1 4 1 1 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 7 1 1 1 1 1 1 1 3	Year 1921: Cases, 18; deaths, 9. Imported. Year 1921: Cases, 1; deaths, 1. Year 1921: Cases, 75; deaths, 31 Oil camp.
Cosamaloapam Nogales Orizaba Papantla Providencia Providencia Purga Rancho de Santa Rosa Rancho "El Jaguev" San Pablo (Papantla) San Ildefonso Tierra Blanca Tlacotalpan Tuxpam Vera Cruz		1 2 4 1	3 1 2 3 1 2 7	Two of these cases imported. Dec. 20-26, 1921: Cases, 1; deaths, 1. Imported.